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# Master thesis

# **Virtual Communication and Project Work**

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# ASSIGNMENT OF DIPLOMA THESIS

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# Theses guidelines

#### Objective:

The aim of the thesis is to study and assess different aspects of virtual team-communication in existing projects. The student will study how do team members experience the virtual forms of social contact, the language use, the intercultural aspects of virtual communication and the interplay of all these elements in the working process.

#### Methodological approach:

Qualitative research based on interviews, analysis of empirical documents

- Theoretical background
- Data collection
- Data analysis
- Results
- Proposals and conclusions

#### Framework structure:

- 1. Introduction. Objectives.
- 2. Review of literature.
- 3. Methods.
- 4. Results, potentially discussion.
- 5. Conclusion.
- X. References
- X. List of Annexes (if any)
- X. Annexes

Extent of work report: Extent of graphics content: Form processing of diploma thesis: Language of elaboration: 50 – 60 pages As necessary printed English

#### Recommended resources:

Harris, T. E., & Sherblom, J. C. (2018). Small group and team communication. Waveland Press.

McLarnon, M. J., O'Neill, T. A., Taras, V., Law, D., Donia, M. B., & Steel, P. (2019). Global virtual team communication, coordination, and performance across three peer feedback strategies. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 51(4), 207.

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Srivastava, P. R. (2020) Communication, Collaboration & Trust: Interpersonal Challenges in Virtual Collaboration Team. International Journal of English Literature and Social Sciences, 5(4), 1273-1278

Warkentin, M., & Beranek, P. M. (1999). Training to improve virtual team communication. Information systems journal, 9(4), 271-289.

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Wendpanga Nelly Compaoré

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#### **Abstract**

Teamwork in a project requires both virtual and face-to-face skills. Furthermore, the subject of virtual communication and project work is a very typical and actual, especially with the pandemic that has been going on for over a year now. It is therefore necessary to define an effective and efficient virtual communication strategy that can be adapted to the project. Thus, this research consists of interviews to evaluate the effectiveness of the virtual communication strategies used within a team. We identified the advantages and disadvantages encountered by these people which could be applied to any type of project. We then assessed the effectiveness of the online courses through a survey, as this was part of the projects' objectives. Based on the objectives achieved, we were able to identify virtual communication strategy points applicable to all projects.

**Key word**: Virtual communication, communication, project management.

#### 1. Introduction

For a few months now, the question of remote work has been raised within many companies. The long lockdown which started in March 2020 has favored implementation of new organisational practices (Frimousse, Peretti 2020). This is even more noticeable when you are a member of a team and working to reach a specific goal. "The pandemic has forced a large segment of the global workforce to go through a remote-work experiment on a scale never seen before and a lot has changed in the last 12 months" (Vasel, CNN Business, 2021)

Indeed, some people have discovered this new way of working online, while for some, it has only been a continuity since it was part of their habits. By 2016, more than 85 % of working professionals were in some form of virtual team. (Morison-Smith 2020) Virtual communication is a contemporary phenomenon since the basic means of virtual communication have existed for several decades.

In fact, when we talk about remote work, it is nothing new because we already have an outline of what it is. A multitudes of studies have already examined the difficulties faced by collaborations and use of technology in multiple contexts. For instance, Morison-Smith has highlighted the collaboration challenges experienced by virtual teams and existing mitigation strategies (Morison-Smith 2020).

However, when it comes to adapting remote working to our habits, we realize the complexity, not only for the team members for several reasons, but also finding the most suitable equipment poses a problem because from one job to another, the adaptability and efficiency is not the same. Also depending on the teams, and the tasks to be accomplished, the diligence of the teams may be felt. Thus, it will be necessary to find the most adapted equipment and tools for each team while considering the tasks to be accomplished.

In a multicultural context, and in a project with regional and intercontinental character, which is what I am going to approach in the subject, the classic means of communication include both facts, virtual and face to face. This is to say that working in a regional project, whether it is multicultural or not, requires both: remote and face-

to-face work. Even if this sometimes requires the members to attend face to face meetings through travelling or in the office they already work.

On the other hand, effective means of communication are not always as well developed. Despites the compulsory lockdown that the whole world has undergone, many were determined to continue with their activities and made maximum efforts to adapt to reach their objectives in any way. Therefore, have they performed better? Have their objectives been met?

Our topic is remote work and focuses specifically on remote working in a multicultural team. The objective of this thesis is to measure the efficiency of their work through qualitative interviews of people who worked on a project in a multicultural team before and after the lockdown. This research work will also allow to define the advantages, the disadvantages, as well as the aspects to be improved and to be considered for teamwork in a regional and multicultural project.

The problem to be responded to is: in the virtual work environment, which strategy for efficient communication leads to an effective and efficient project delivery?

In order to respond to this problem, we conducted a documentary research and interviews within an international and multicultural team. The interviewees have worked on national and regional projects. This thesis may identify gaps and propose better communication strategies, if necessary, in order to make the communication within the project more efficient. This could also help some team members to become more diligent and encourage them to deliver better results.

# 1.1 Objectives

# 1.2 Project management context:

The theme of this thesis is related to project management. As project management is the major subject of this European Master's degree entitled Regional and European Project Management, it is therefore related to my studies and my internship. Thus, it was practical for me to combine the current context of my internship with the topic. My internship is currently taking place at the International Atomic Energy Agency (IAEA or the Agency) in the Technical Cooperation Department (TC). The fact that the internship is linked to the thesis also makes it possible to understand, from the outside, the functioning of the IAEA TC cooperation.

When we talk about technical cooperation within the agency, we are talking about the implementation of projects between the Member States and the Agency. The aim is to transfer nuclear technologies to the countries in accordance with the motto of the International Atomic Energy Agency: atom for peace and development and contribute to the achievement of the sustainable development goals (SDGs). In other terms, 'The programme also helps Member States to identify and meet future energy needs, and assists in improving radiation safety and nuclear security worldwide, including through the provision of legislative assistance.'

There are four TC departments which are TC-Africa, TC Asia and the Pacific and TC Europe and TC Latin America and the Caribbean. In the context of my research, I will be focused on the TC Division for Africa (TCAF). How does technical cooperation work?

Technical cooperation takes place through the following assistance modalities:

- The granting of scholarships for long- and short-term technical training.
- The organisation of group training at national and regional level.
- Help the member states to identify and meet future energy needs.
- The deployment of equipment according to the project in progress.

In summary, this cooperation allows countries to benefit from training, expert services and necessary equipment for the development of the technology in the respective

countries. However, for these achievements, the project implementation has to be coordinated. The implementation of the projects is coordinated through the assistance of the PMOs and TOs. They are each assisted by other staff members.

In fact, the IAEA is non-resident in the countries where it operates. Therefore, it has no national or regional office in Africa. This means that staff members have to make several trips to these countries. It is also necessary to consider the travel of lecturers and fellows or training participants to provide or receive training abroad. The procurement often requires physical intervention by staff members. This shows that the physical presence of the team members is very necessary for the implementation of the projects. Therefore, in the current context, the staff members have been immediately obliged to modify their operating system. Needless to say, the Covid19 also had an impact on the professional life of each of the staff members. With the compulsory lockdown, they all had to stay at home, think and reorganise themselves differently.

As the Internet is the only virtual means of communication until now, it was necessary to rely on the new IT infrastructure. The agency had to improve these infrastructures immediately. It provided to all its TC members laptops so that they could each continue their assignment from home. The agency made sure that the laptop was connected to the office computer so that the data was simultaneously registered. Wherever the staff members were, they all had the same information that they needed to work with.

The physical meetings that used to be held have been transformed into meetings on certain virtual platforms. All these obviously had consequences for their work because of several reasons, whether it is the knowledge of IT tools utilization or the work itself or even their psychology.

According to the agency's website sources, the roles and responsibilities of the involved persons in the implementation of the TC programmes are as follows:

The guidance of TC programmes is provided by permanent missions through General Conference resolutions and Board Decisions.

The NLOs (National officers): designated by each member state to be the primary contact between the Agency and the relevant country.

The PC (Project counterpart) is in charge of the overall management and direction of a TC project in a country.

The PMO: As their function indicates, they are the TC project managers in one or several countries of the department where they are the members' staff. They are also responsible for reviewing the concepts of all projects.

The TO (Technical officers) are responsible for the development of the projects in collaboration with the member countries and the PMOs. They ensure the technical integrity of TC activities. He is the staff member of the agency that prepares expert missions and training courses, identifies host institutions, and develops training programmes for fellowships, and specifies necessary equipment.

For our research, we will be focused on TC PMOs and their assistants who are the agency member staff at the heart of the TC programmes activities.

#### 1.3 The aim of the thesis

The topic of this thesis was proposed by my internship supervisor, Ms. Doris Fetsher, professor at the University of Zwickau in Germany. The reasons for her proposal are explained by the very current context of Covid 19 which affected the whole world.

For my part, I chose this theme not only because of the current context but also, as a graduating student in project management, we will be led in one way or another to work remotely. Besides, why not contribute to Science evolution by using the new options that technology offers us? On the other hand, we must be aware that we are talking about a healthy and appropriate use of technology. Do we feel as comfortable and effective in the virtual world as we do in the face-to-face world?

At first glance, remote work is a great opportunity for financial and time savings reasons, also for comfort, ease, etc. Given the evolution of current technology, remote work could be imagined in several areas provided that it suits each member of the team and especially that it does not affect the expected results. The current context of the pandemic was a surprise for everyone. Each worker had to adapt and give their best for the benefit of their entire team.

The purpose of this thesis is to conduct qualitative research within a team of staff members who have the same project goals in order to determine the performance and the effectiveness of team members when working remotely. It will also be important to identify the factors that slowed down or hindered the completion of certain tasks so that they can be improved during a future organization. In the long run, could the effectiveness of remote work be carried out in new perspectives?

For instance, the research work will focus on the technical cooperation team of the International Atomic Energy Agency's Division for Africa. Through the analysis of individual interviews, we will determine the advantages and disadvantages of working remotely, and the method the team used to achieve its results. Based on the results we will determine if the method used by the team was the most suitable and possibly the same method could be adaptable for other teams. The reason why the researchers will be restricted to the TO, PMOs, theirs assistant and the training participants (beneficiaries of the training courses), is that we want to focus on the strategy used at the level of the agency and also because the agency is the main stakeholder, it strategy could be applied and with other member states.

However, the performance in a specific area obviously depends on several factors considering the person himself and his assignments. Defining the limits of remote work and also determining to what extent the virtual word alternative means to the delivery of a development organization would be the main questions addressed hence the following problematic: in the virtual work environment, which strategy development for efficient communication leads to an effective project.

To address our problem, we conducted theoretical and empirical research on the evolution of projects before and after Covid. At the end of our analysis, we will have a discussion part that will allow us to evaluate the effectiveness of the actions carried out by the staff members and the quality of their achievements by using the evaluation model of KirkPatrick.

### 1.4 The Virtual environment at work

Within the framework of the Technical Cooperation Division for Africa, the working method is virtual as well as face to face. In concrete terms, member states work

remotely with the agency's staff members, particularly through the NLOs who the country representatives are. They live in their country and only join the agency for meetings when their real presence is necessary.

The same applies to the Project Counterparts who are resident in the different countries and whose role is to formulate and implement projects according to the Country Program Framework (CPF). On the opposite, to PMOs and TOs who are resident in Austria. They travel when necessary for the respective projects in the different countries. (IAEA website).

Furthermore, in the virtual world in general, many companies could not imagine working remotely before the pandemic of covid19. Some data from the European Commission show that in 2019, 5.4% of employees in the EU-27 were working from home. It points out that working from home was generally more for the self-employed than for employees (EU Commission, 2020)

Remote working is not a habit. According to Eurostat data, in Europe, Finland is the country where employees work remotely the most, with 25.1% of employees usually working online in 2020 compared to only 1.2% in Bulgaria. (Eurostat, 2021). This is far from being anchored in the habits of workers.

Also, if in the European Union where 90% of households have access to the Internet in 2019 and this percentage has increased to 91% in 2020 and continues to increase. (eurostat, 2020). Moreover, one could imagine that the number is less in undeveloped countries in Africa for example.

Virtual work requires a certain discipline. First of all, it will be necessary to specify whether the project is national, regional, interregional, or even if it is a personal project elaborated following an agreement between several people, especially those of a commercial nature, or those based on research etc. The TC department deals with national and regional projects. The national project includes one country whereas regional project includes many countries. Correspondingly, we will define the virtual strategy that goes with it.

It should also be considered that not all areas are eligible for virtual work. In any case except in case of extreme development of the technology. For instance, the case of

Professor Jacques Marescaux who was elected digital personality in 2013. His exploits consisted of performing surgeries from his screens in York. In July 2012, he performed a liver cancer operation by robotic surgery (C.Menguy, OBS, 2013). 3D surgery, for example, is now possible thanks to the evolution of technology. This last case is relative to the reference time because technology is constantly in evolution.

In addition, we could consider the new applications and social networks that are developing more and more in order to facilitate remote communication. So the virtual environment expands progressively on all virtual platforms.

Several functions are now achievable remotely thanks to technology and maybe others will be in the long run. Thus, in our case, we will focus on remote work in the field of national and regional project management for instance those of the TC division for Africa. This is why the covid19 pandemic is not without consequences on people's work. If the virtual environment can be considered a revolution, it is because of the developments in communication tools. During the lockdown, the TCAF staff members, although they already had internal virtual communication tools and were not very well known, they relied on external communication tools.

#### 1.5 Virtual communication tool

Indeed, the first tool of remote work the most used is the computer. By substitution we can use the phone, the tablet etc...

Here are the online tools that the Technical Cooperation officers have always used internally:

The TC programme cycle management framework (PCMF) is the primary platform through which the TC programme runs in a collaborative manner between the member countries and the agency, and is based on a flexible methodology, which emphasizes agency Member Countries' prioritization and ownership of the project, and relies on current best practices, user-friendly IT web-based systems and the principle of teamwork. The approach enables the Member Countries to take responsibility for the formulation and execution of its programme, while allowing stakeholders in the Secretariat to support the process and to collaborate in a transparent manner. It is

linked to the Country Programme Frameworks through the identification of project concepts, which are then developed into projects, based upon assessed needs of Member States and joint appraisals in the field. More specifically, this improved approach:

- Focuses more on need assessment and problem analysis supported by the agency.
- Reduces the time and effort spent by the agency on project formulation and budget allocation of TC programme by streamlining, as well as making more efficient and transparent the selection, appraisal and approval processes, while enhancing the project quality.
- Increases the participation and teamwork of all stakeholders from the outset. (IAEA PCMF Platform)

With respect to the online meetings/events, external platforms were used, although these were minimal compared to the number of meetings that there are now after covid.

Effectively, the main virtual and official communication tools used by the agency are Microsoft Teams and Webex and office fone calls. Informal communication tools are cell phones through the WhatsApp application. Some of the staff members have professional cell phones where they can be reachable at any time. The main language used is English, next to the other official languages which are Arabic, Chinese, French, Russian and Spanish. In order to illustrate this diversity of culture, I decided to conduct the interviews in French and English.

Besides there are many online tools for project management used by other companies. For instance, there are softwares and features as:

- Proof hub: used by organizations like Nasa, Disney, Taco Bell. adaptable for big and small teams. Task management, time management, project communication, Collaboration, project planning, project reporting
- Asana: The free tool offers a basic dashboard and search, Group tasks into sections or columns in a list or board project, Notify employees using a personalized inbox, A Gantt style view of how projects fit together, Schedule

- and prioritize tasks on a special Asana calendar, Generate detailed Progress reports.
- Mavenlink: Manage multiple projects with ease, Handle project schedules in an intuitive interface, Gain visibility of all your projects in your portfolio.
- Scoro: A single place for projects, clients, and teams, Be organized in every aspect of your business with seamless workflow, Get a real-time overview and automated reports, Can be integrated with tools like DropBox, Mailchimp, Outlook, and more.
- Workzone: Get top-level reports so everyone knows what's next on the list, Makes way for faster communication, Features like creating tasks, to-do lists, sharing files easily improves collaboration, Set permission for different users including clients
- Avaza: Visualize, filter, and group tasks within and across projects, Flexible project budgeting and billing options, easily manage resource allocated to each project, One-click time tracking from every screen
- Cage: Add annotations directly to images, video, audio, PDFs, share design decisions, customize colour palettes and layouts, Record different work in progress.
- Advantage: Automate and manage projects more efficiently, streamlined processes to manage time, tasks, and expenses, Complete reporting and forecasting, share files and collaborate
- Evernote: Set reminders, track deadlines, and gather feedback, save important emails, stay on schedule with checklists and reminders, Add keyword tags on notes to find them quickly.
- Wrike Tasks and milestones can be synchronized to Google, iCalendar, and Outlook calendars, Gantt charts help create visual timelines, Helps you to turn strategy into an actionable plan Provide accurate and up-to-date info to clients. (ProofHub)

While others of this softwares have a free version, some are fully paid.

In addition to the PM virtual tools, there are other online meeting tools such as Zoom, Jitsy, Google meet, Duo, GroupMe, GoToMeeting, Skype, facetime, join.me, livestorm in addition to the main used by the Agency. (Smartmeeting). Through these tools, there

are some virtual interaction tools that could be used such as: Meeting Pulse, Sli.do, Mentimeter, LoQuiz, BuzzMaster (Meeting pulse).

Most of these virtual tools have been improved / upgraded especially during the lockdown time. For example, before the Covid19, on a Team's video meeting, it was possible to see only three people on the screen. Now it is possible to see all the participants at the same time. It is even possible to change the background as some of the other online meeting tools. There are also some communication platforms that can be used through a domain e-mail address. Some companies prefer to buy a domain name for their business to improve in one hand their credibility but also the For domain e-mail address could privacy. instance, а be "ceoname@buisnessname.com". This is what the agency is using for the professional e-mail addresses which is X@iaea.org.

We cannot talk about communication media and ignore social networks. They are used to communicate and almost everyone who has access to the internet is on a social network. Several studies have shown that more than half of the population uses at least one social network, whether for personal or professional reasons. The most one used for the companies are Facebook, Instagram, LinkedIn. This is to illustrate the multiple virtual communication that does exist. According to a company to another, the tools used are different and should adapt to the activities.

#### 2. Literature review

#### Definition of terms

Before moving on to the analysis of the results I found it necessary to define the key terms so that we remain focused on the research theme. Therefore, this part will focus on the definitions of communication and virtual communication in order to establish the difference. From this, we will focus on the virtual one which is the theme. Then we will talk about communication in projects which will establish the basis for project achievement. Finally, we will focus on the efficiency of the virtual communication strategy which is the objective of our thesis.

### 2.1 Communication

"Communication is an important part of everyday life and, as such, present at all times. However, its perpetual presence often implies simplicity and mutual understanding." (A. Gamsriegler, 2005, P.1). A priori, we can define communication as the means by which people interact.

The online cambridge dictionary has several definition of the word "communication: communication is "the various methods of sending information between people and places, especially phones, computers, radio, etc." it is also the "ways of moving between one place and another", "the process by which messages or information is sent from one place or person to another, or the message itself". "the exchange of information and the expression of feeling that can result in understanding", "the process of sharing information, especially when this increases understanding between people or groups".

In our work, we will focus on the interaction between people which include "the exchange of information and the expression of feeling that can result in understanding". Therefore, in our everyday life, effective communication seems obvious to us. "Think twice before you speak, because your words and influence will plant the seed of either success or failure in the mind of another." This quote from Napoleon Hill reminds us that good communication is conscious and requires some skills. In other terms, we

should learn how to communicate, especially in a project management team and an intercultural team".

The words are not sufficient because many other things have to be taken into account. "Communication is not a solo activity, unless you're training to communicate properly to others later" (Ellis, 2009, P7). Thus, it is necessary to know the person you are transmitting the information to. That is why Ellis suggests making an effort to push as much information as we need even though we are aware that we will never have the complete intelligence about the audience (Ellis, 2009, P 29).

Applying to project management, in order to achieve the common goals, Middleton and Wedmeyer emphasize communication planning. First they defined planning as the conscious effort to adapt a systeme to its environment in order to achieve systems goals." (Middleton and Wedmeyer, 1985 P 41) and they continue further with the definition of system which is "a set of interdependent part that works together as a whole toward a goal or goals, in which the performance of the whole is greater than the simple sum of the performance of its part. (Middleton and Wedmeyer, 1985, P 43). Indeed, when several people work together, the final result is the sum of the individual work of each. And to reach this result agreed upon from the beginning, it was necessary to plan considering the team members coming from one or different environments. So, the system needs to adapt to the environment, here considered as the external factors.

Considering the project team at the TC cooperation, The IAEA system, which aims at transferring nuclear technologies, contains the technical cooperation, which refers to active members of a well-defined project. The result produced by the Project actors will be put together and impact a whole population. The external factors they need to adapt could be the locality where the project is implemented, the working environment of each of the members, the intercultural factors etc... This is what they call the hierarchy of systems (Middleton and Wedmeyer, 1985, P 43).

In order to coordinate each activity to reach the goals, there is a big need for communication efficiency. Effective communication involves several factors. Not only do we need to be sure that we have used the most appropriate means, but we also need to know if the information has been well transmitted and well applied if required.

For this reason, we should consider the body language, the high and low context, the interculturality and even the personality of the interlocutor(s). This becomes even more complex when the communication is done through virtual platforms.

# 2.2 Virtual communication: History and definition

Telecommuting is commonly defined as employees doing their job from home or another location besides the employer's site, using information and telecommunication technologies. However, there remains some ambiguity regarding the actual amount of time spent working remotely;" (Virtual Work and Human Interaction Research 2012 P 9.

In France, the definition of teleworking is quite the same as mentioned above. 'toute forme d'organisation du travail, dans laquelle un travail qui aurait également pu être exécuté dans les locaux de l'employeur, est effectuée par un salarié hors de ces locaux, de façon volontaire en utilisant les technologies de l'information et de la communication. » (Art. L 1222-9 as cited by Latribune.fr, 2021).

Consequently, teleworking implies virtual communication. Virtual communication is the fact of communicating through technologies since remote working is not possible without virtual tools. Text emails, messages and video calls are ultimately a visual form of virtual communication. (E. Dhawan, 2021, P 5)

A publication of latribune.fr tells us the origin of telework. In 1950, the founding father of cybernetics, Norbert Wiener, was in Europe supervising the work on an American building. In the 1970s, with the advent of the fax and the telephone, this phenomenon began to spread. The word "telework" appeared for the first time in 1972 in an article in the Washington Post. As for France, it evoked the theme of telework during the G7 in Brussels in 1995. From a political and legal point of view, its social, economic and environmental advantages were exposed. Finally, in 2002, the non-binding European Framework Agreement on Working Outside the Company's premises, which allows teleworkers to enjoy the same rights as workers on the company's premises, was signed. This method is framed by the labor code (Latribune.fr, 2021).

In the context of globalization, where we live during our air, virtual communication is necessary. Indeed, we can notice in our societies that people meet less and less. Several reasons justify this. People have become lonely because of their work which occupies most of their time. After having exhausted oneself at work, it is difficult to give oneself to other activities after work in the middle of a classical work week. As a result, we have become accustomed to socializing through social networks. (MF Hirigoyen 2007). In big cities for example, the population is dense, yet in the private sphere, communication is mostly done through the telephone, social networks.

The advantage of this phenomenon is that we can even communicate outside of our family and friends. We can find friends and acquaintances anywhere in the world. It is even easier to get to know strangers in the virtual world than in the real world, i.e. face to face. (MF Hirigoyen 2007).

In the context of work, Erica Dhawan in her book sheds light on these data: 70% of communication within a team is virtual. According to the Journal of Personality and Technology, 50% of our emails are misinterpreted. The New York Time reports that 43% of American workers work remotely at least once, and that percentage exploded during the Covid pandemic.19 Twenty-five percent of those surveyed said they met more often online than in person. One survey found that 90% of cell phone owners frequently carry their phones with them and 76% admit that they rarely or never turn them off. (E.Dhawan, 2021, P.6).

Virtual communication involves digital body language. Although in normal communication, facial expression is missing, "real speech is translated on the screen" (E.Dhawan, 2021, P.47).

- Traditional Body Language involves: a head tilted to one side, signaling that another person is listening attentively.
- Digital Body Language involves: "liking" a text. Praising another person's input in an email, Making a detailed comment verbally or in the chat box during a video call when someone expresses an idea,instead of just saying, "I agree.
- Traditional Body Language involves: stroking your chin or pausing for a few seconds, signaling that you're thinking about what's just been said.

- Digital Body Language involves: taking a few extra minutes to respond to a text, indicating respect for what it says. Writing a long or detailed response to an email that shows thought and focus. Pausing during a conference call to take in what's been said instead of blurting out the first thing that comes to mind.
- Traditional Body Language involves: smiling. (It's contagious. Our smile lights up the areas of the brain linked to happiness, which is why the people we smile at tend to smile back and/or feel a stronger sense of connection with us.)
- Digital Body Language involves: using exclamation points and emojis (well, within reason). Adding a simple Have a great weekend to the end of an email. Laughing during a video meeting.
- Traditional Body Language involves: nodding. Bobbing our heads upand down makes us seem both interested and approachable. Nods, like smiles, are infectious, meaning that if we nod while we're speaking, others are more likely to go along with what we say.
- Digital Body Language involves responding promptly to a text, showing engagement by replying to an email with substantive comments. Writing I completely agree with what you're saying in the group chat during a Microsoft Teams meeting. Using thumbs-up emoji in a video meeting. (E.Dhawan, 2021, P.11).

For a better virtual communication, Dhawan proposes four low of Digital body language:

- 1. Visibility: How to show intuitiveness when expressing yourself.
- 2. Communicate carefully: minimize misunderstandings as much as possible.
- 3. Confidently: overcoming habitual fears
- 4. Trust totally: everyone listens and can ask for help whenever needed.

When communicating virtually, one must also consider the intercultural side. In the high context, most of the communication is focused on the physical. This includes facial expressions, tone of voice and gestures. (Edward Hall, 1979, p. 91 as cited in A. Gamsriegler, 2005 P6). As a result, the speaker needs to decode the message since it contains less explicit information. On the contrary, in a low context, people take time to say exactly what they want to convey in order "to convey without beating around the bush" (A. Gamsriegler, 2005, P5). This is the confrontation with the high and low context. At that point, this side is reduced at the IAEA, as there are some written

standards mentioned in the written communication manual reference which are accessible only by the staff members via an internal platform called insite.

# 2.3 Project Communication

It is useful to know that communication is the foundation of any project. A project's success depends on effective communication and on managing communication stakeholders effectively (Project management Institute, 2019, P. 99). Communication must take place at all levels of the project. This is one of the major points of the principles of project management, which applies to all projects. In other words, you can't talk about project management without talking about communication. Thus 'Effective project management ensures that we get the right information, to the right person at the right time and in a cost-effective manner. Proper communication is vital to the success of a project.' (H. Kerzner 2017, P.203).

Kerzner defines a project as any series of activities and tasks that have a specific objective... defines start and end dates, have funding limits (if applicable), consume human and nonhuman resources (i.e., money, people, equipment), are multifunctional (i.e. cut across several functional lines). (H. Kerzner 2017 P2). He also emphasizes the role of Project managers by stressing that they must be in control of all money, employees, equipment, facilities, materials, information/technology. Regarding the project (H. Kerzner, 2017, P11-12).

The most important thing is to achieve the final goals. However, to achieve the goals, you need a performant team. When analysing outcomes, one necessarily needs to refer to the process leading to the outcomes. (Amici, Cepiku, 2020, P.98). Performance is defined as the ability to achieve the goals set, while outcomes define how the goals were achieved. (Kannensky & Morales, 2015). In that way, the outcome at the end of the project is not necessarily in line with the original intended goals.

This is where the organization comes in. The definition of this term refers to structural connections between the elements of some systems (IKO, 2020, P.5). In the framework of the international organization that involves several people and several governments, everyone must be satisfied despite the various actors and conflicts of interest (Amici, Cepiku, 2020, P.106). Thus, earn value management (EVM) was developed. Which is in fact a methodology developed with the team and project

managers stakeholders that combines scope schedule and resources measurement method process practices and tools for managing project performance. (source). Some of the advantages of the EVM is the fact to identify the critical paths of the projects in order to intervene in advance. This allows decisions to be made in the future, for example, investment in new technology which is not insignificant. Above all, EVM empowers the active staff members of the project by providing them with visibility. Providing an overview of the situation, both at the project and portfolio level (Ecosys). Within the IAEA, PMOs are highly dependent on teamwork. No project can be led by one staff member alone and better, all project actors have to agree on even the mini objectives within the project.

On the whole, communication in a project involves these four elements:

- Communication planning: It consists on the one hand in identifying the information, and on the other hand in identifying the means of transmitting the information to the stakeholders.: "who needs what information, when will they need it, and how will it be given to them".
- Information Distribution: This is what makes information available to everyone so that it can be used as needed and in a timely manner.
- Performance Reporting: It is important to keep track of the team's performance through status reporting, progress measurement, and forecasting.
- Administrative Closure: this involves disseminating all the information gathered to make the completion of a phase or project official (PMI, PROJECT COMMUNICATIONS MANAGEMENT, P.103).

Consequently, whether team members work virtually or face-to-face, they must absolutely respect these principles of communication in a project.

# 2.4 Efficient Virtual communication strategies

Effective communication requires the application of certain strategies. For this we look at the objectives and the performance of the teams.

The HBR (Harvard Business Review) guide provided some advice for better communication and working remotely: first of all it is necessary to keep a firm routine: Which means, try to behave as if you were going to work in an office. Then you have

to consider your physical environment because this can help you to concentrate. Also, be shown, this will allow the other team members to see your commitments. It is also important to take care to explain to your young children so that they understand that you need to stay focused. Despite the remote work, try to build relationships and "assure you have regular touch point with everyone" finally you will have to stay motivated, so "tell you brain it is time to work (HBR guide remote work 2021,P 26-29). These tips that could be applicable on a project management team concerning remote working. In short, it will be important to stay organized as much as possible and not let technology distract you at every turn because "Technology is labeled as a "distraction that prevents us from really connecting." (T. Neeley, 2021, P48).

'We think that video meeting styles, signs of emails signature creates the impression that events enhance or wreck our relationship' ((E.Dhawan, 2021 P6)P11-12. So it is important to make sure that instead of alternating the relationship, we need to consolidate them. For this, the HBR guides to appreciate the upsides and give benefit of doubt. It is also important to consider cultural differences and remains conscious and respectful that others work at different times (HBR guide remote work, P78), to minimize the risk of conflict. If, despite precautions, there are conflicts that cannot be resolved, do not hesitate to involve a third party. (HBR guide remote work, P55). However, even if remote work seems to be effective, physical and social boundaries should be maintained as much as possible (HBR guide remote work, P56).

In order to improve communication in a project, there are techniques that are applicable to all projects. "These techniques include: obtaining feedback, possibly in more than one form, establishing multiple communications channels, using face-to-face communications if possible, determining how sensitive the receiver is to your communications, being aware of symbolic meaning such as expressions on people's faces, communicating at the proper time, Reinforcing words with actions, using a simple language, using redundancy (i.e., saying it two different ways) whenever possible (PMT, 2019, P208).

Even if we respect all this, we can't avoid conflicts because the receiver might have a different perception especially if he is more focused on his work than listening. "Don't assume that the message you sent will be received in the form you sent it". He may ignore conflicting information and do as he pleases, he may also have cases where he is emotionally upset. (PMT, 2019, P208). That said, the foundation for efficient communication is established from the beginning, for a successful project. "While

efficient organizations can complete tasks and achieve goals more effectively it is also true that well functioning process do not necessarily imply that an entity fulfills its goals" (Guntnerrand Thompson 2010 as cited in Amici, Cepiku, 2020 P2032). This is the case for international organizations, for example, which may be constrained by political factors (Guntnet and Thompson 2010 as cited in Amici, Cepiku, 2020 P108).

The effectiveness of the project is assessed in relation to the team. Indeed, the area of team members is equally important because if the objectives are easy to achieve, the team will succeed perfectly even with a low performance. This is why the evaluation strategy is very important. Because with the evaluation, the same strategy can be applied to other similar projects.

#### 3. Methods

# 3.1 Research proceeds:

The first method I approached in writing this thesis was to establish the relationship between my internship and my current studies. That means, I had to start my internship to find the right problem related to my assignments. Thus, the actors of my research were first, my co-workers. The IAEA being a large international agency, there are many actors involved in the projects.

Then I moved on to researching the literary documents that are related to remote work. Hence, I did my research through the platforms of the online university libraries, for instance, Cairn info, google scholar and also through the Vienna International Centre Library. Being bilingual, I was willing to use English and French documents as well as German at times. I also drew my sources from agency documents and scientific articles from some online sites.

Fortunately, I have been supported by my supervisor, Ms. Doris Fetscher, to validate my research plan, problem and method. Some of my colleagues were also available to clarify some information about the agency and their activities.

# 3.2 Transcription and analysis and evaluation

Among the staff, I have interviewed nine people including three TOs, five PMOs, and one APMA.

Based on my research, I was able to develop the following method: Conducting interviews with my colleagues in the TC division for Africa through an interview guideline (see annex 1). In fact, the questions were developed based on the assignments of the interviewees who worked on the agency's projects. Fortunately, my colleagues were interested in my research programme. When I approached them about the interview questions, some were reluctant because of the confidentiality clauses they are subject to as part of their job. For this reason, I had to be more specific about my outcome objectives and give them an idea of the questions that would be asked. To make sure to interview the right person, I approached a particular

colleague who directed me to the appropriate people to be interviewed according to my questionnaire and the information I was looking for.

Finally, despite the busy schedules of the staff members, all the interviews were conducted, and I did not have any refusals. They all answered the questions with great pleasure and were even ready to help me afterwards for possible clarifications. During the analysis, I carried out an interview field (see annex 2) note and a sequential analysis (see annex 6). Within the sequential analysis, the table contains the following information: Speaker, then the answers they gave which are related to each question. The transcription of this part is a semi-verbatim transcription made by Ambertranscript and revised by myself to be sure that all the words pronounced are correct. Next is the memo where I have made a summary in a few words of what they have said to be remembered, and lastly, in the research question part, I answer the question according to the answers given by the speaker. I have tried not to use the terms he or she to keep the anonymity of the genre as well. But in case of repetitions, he is used but in a neutral sense instead of repeating the term "interviewee" every time.

After the sequential analysis, I proceed to the result where I transcript partially some part of the interviews under the GAT 2 convention. Therefore, due to time constraints, in the results part, not all interviews will be transcribed according to the GAT 2 convention (See annex 4). Also, because the responses of the officers in the same positions are almost identical, we group the responses into categories in the Transcription Analysis and Evaluation section, which are part of the results. Even though the responses of each of the interviewees are all important, we will focus only on the major common points, and the major differences in order to be able to establish the relationship and propose improvement on these points.

Since the interviewees wished to be anonymous, the names of interviewees will be masked on the anonymously processed, Data Consent Agreements (See annex 5). Thus, we use the alphabetical letters to identify them.

## 3.3 Survey analysis

A survey has been elaborated for training participants who are indeed people who have been trained by the agency in the framework of a cooperation. I felt that this survey was important because it can be directly and concretely evaluated because the training is part of the TC projects objectives. Since the nuclear technologies are transferred, knowledge related to the project purpose is shared through national training courses, regional training courses, long term and short term fellowship, and expert missions. For clarification, the training courses do not exceed 2 weeks whereas the fellowship could be longer than six months.

For my research, I target the participants of different virtual national training courses. For the analysis, I will link the courses to the different thematic areas related to each project and elaborate different hypotheses to see if the efficiency of a virtual training depends on the thematic of the projects. In fact, each project belongs to one of the seven thematic areas which are: Health and Nutrition, Food and Agriculture, Water and the Environment, Industrial Applications/Radiation technology, Energy Planning and Nuclear Power, Radiation Protection and Nuclear Safety, Nuclear Knowledge Development and Management.

Evaluating the knowledge acquisition of training participants also allows the project's team members to improve their efforts for future projects if they wish to achieve more. In sum, the purpose of this survey is to evaluate the effectiveness of virtual training and see if the knowledge has been effectively applied as elaborated in the project.

# 3.4 Kirkpatrick evaluation model

The evaluation will be conducted through the Kirkpatrick model.

The Kirkpatrick model is an evaluation model published in 1959, revised in 1975 and 1993 by Donald Kirkpatrick, former Professor Emeritus at the University of Wisconsin. Henceforth, this is the method of evaluating training courses structured on four different levels by considering the degree of satisfaction of the participants and the effectiveness of the training.

On the one hand, this evaluation method will be used to evaluate the TC Africa team members, since our participants (interviewees) had to consider the new measures taken in their work, which is a form of training accordingly the participants should adapt,

and therefore be trained to use the new work tools efficiently. On the other hand, we will also use this evaluation tool through a survey for the people who have benefited from the training provided by the TC TOs to understand once again whether these training courses have been well assimilated and correctly applied.

Correspondingly, the First Level is designed to assess the participation of the participants. It is in this part that they were asked to mention their superficial opinion on the relevance of the session to their respective jobs.

In relation to our study, we will assess the interviewees' appreciation of their situation and the training participants' appreciation of the online courses.

The second Level focuses on the participants' achievements. The questionnaire is asked in order to understand to what extent the participants have assimilated what they have been taught. It is also the way to evaluate the quality of the teaching provided.

Here we would like to understand the actual use of the communication means by the interviewees and at the same time to know to what extent the training participants have assimilated the teaching of the online courses provided by TO.

The third Level consists of assessing the implementation of knowledge. It is about whether the participants had to apply what they have learned. Once the theoretical levels have been validated, it remains to be seen whether the knowledge is applicable in practice.

In our study we will focus on the process of project management by TOs and PMOs, PMAs and the successful implementation of the training participants' learning.

Level 4 is the final level which allows us to assess the outcome. The question is asked to see the concretisation of the implementation of the training. In other terms, to know the outcome of the practice.

Here we will finally assess the results of the interviews about the achievement of their intended objectives as well as their expectations regarding the results provided by the training participants.

It is based on these four levels of evaluation that we will finally be able to validate the strategy and the efficiency of the team's communication. Therefore, it was important for this study to choose people from the same team working for the same objectives.

#### 4. Results

# 4.1 Interview analysis

After several weeks spent at the Agency, and several weeks of research using the above-mentioned method, I have observed the following results.

# 4.1.1 The projects management before and after the covid

All the people interviewed confirmed that they had worked both virtually and face-to-face. The way of working in this team is therefore hybrid. Based on this assumption, one could suppose that the team members would not have any difficulty in switching 100% to virtual.

The way of working, explained by a Technical officer.

Α

{00:42} so: generally there there are three ways you can do the projects, so i may not have changed much(.) but one is that is da some of the iaea team members, especially in t-c. or even the technical department. visit the country before. or during the design of the project. that's one way and then talk to the participants about: how the projects are desi:gned. a logical framework, matrix, everything. uh and sometimes it's not possible to go but then a group of participants can come to the iaea for workshops, and then they are trained, over a period of time-maybe a week, and then they can (.) meet also the officers and discuss. and then design. uh: the third one, which is even more common-sometimes-those two are not possible. or they were not planned then it is virtual. absolutely virtual-where ((...))p-m-o-s t-o-s and counterparts work. together. but virtually(.) sometimes they can jump in with a: with a question, with a: videos or or whatever, but it's typically virtual. so. in a sense, the lockdownmay-or-may not have affected the design of the project, depending on which of those three. buT let me add that even if there was training in the country still- there will be that virtual part. where the to pmo and counterpart work to design the project. the reason is that it's a process. it takes several months of designing the project from concept. to developing it until the end. so there will always be an aspect of the virtual which may not be affected by lockdown((...)).

The way of working explained by a PMO

{1:00} notre travail; consiste à faire de l'administration de programmes. pour les projets de coopération technique. °h pour le cas de: l'aiea c'est un peu particulier. °h à l'inverse. de la plupart des organisations uh internationales l'aiea n'a pas (.) d'administrateurs résidant. dans des pays. donc comme résidonns; tous à vienne, °h et nous avons un portefeuille def pays que nous visitons une fois l'année pour une semaine à 10 jours. °h, en comparaison à d'autres institutions, qui ont des: représentants qui résident dans les pays, même, donc uh si c'est une première différence; en ce qui concerne cette institution-particulièrement-qu'il-faudra-noté, °h cela veut dire quand même que: nous utilisons beaucoup. l'internet disons le uhm l'email parce que nous ne sommes pas présents sur le terrain. °h mais. par contre, toutes-nos activités étaient organisées la plupart du temps en présentiel. ça veut dire des cours de formation. les: visites d'experts. °h uh les réunions, uh ce qui se faisait à distance, c'est plutôt de la partie coordination, à travers des emails. alors, ((...)) pour les visites, pour la co. il y avait une visite régulière annuelle; de coordination. voici un peu comment c'est présentée avant covid. alors; depuis le covid mainenant: c'est devenu pratiquement- à 100% impossible d'organiser des événement donc uh l'impact du covid, qui nous a d'abord surpris, nous a quand même forcé à repenser le: les méthodes, pour pouvoir mettre en œuvre notre programme, eh c'est là, donc où nous avons coordonné organi nous avons aussi eu réu organisé beaucoup beaucoup de; formations; virtuelles.uh les réunions virtuelles. les les meetings et les workshop virtuels. donc oui, je dirais que vraiment, il y a eu un avant et un pendant covid. donc, il n'y avait plus de contact du tout. uh cela a aussi impacter parce que quoi qu'on dise; il y a eu des des des cours ou des évènements ((...)), qui malheureusement se tenus virtuellement, et pour cela, nous sommes toujours dans l'attente.

From both views, the working way is different. One is focused on the technical side of the project and the other on the administrative side of the project. However, they all emphasized the temporary in-country travel, the work that is usually done partly remotely and the collaboration with team members including PMO TO, NLO PC.

# 4.1.2 The remote working could have been done all along

One of the questions asked of the interviewees was "Do you think that this job could have been done all along?

Most of the interviewees answered yes for personal reasons that would be advantageous to them and no because some accomplishments absolutely require the presence of certain team members. This lockdown made people understand that they could have been working remotely all along. They feel more creative, more inspired, more concentrated, more organized, especially for people who do leave alone. However, even for some people who have family and children, find out that it is better to work from home at least from time to time.

This new way of working brings a new dimension of remote work that is added to the team. The first dimension is the one that is done with the countries and includes the externals to the agency, and the second is the one that is done within internals of the agency, and the third new one is the remote working between the internals.

# - B, PMO

{10:15} je dirais-que: en tout cas, y a eu le covid. °h effetivement a été. quelque part. entre guillemet une opportunité; de forcer. une nouvelle approche. du travail. °h aujourd'hui, les enseignements; uhm hum que le covid. uh a donné, c'était d'abord c'est des enseignement forcé. parce que nous savons tous que ce changement culturel dans le travail ou dans le comportement; n'est est rarement volontaire. donc, nous avons été forcés. uhm de le faire. et il y a les changements difficiles ne peuvent être fait pour moi déjà que dans la force. et donc je pense que c'est une opp; le covid a été une opportunité. d'explorer. et: de de proposer une nouvelle approche de travailler avec le numérique et: je pense que: après covid. certains de ses réflexes vont se perfectionner et rester. °h il n'y a pas que des inconvénients. il y a eu beaucoup d'avantages; au télétravail, °h notamment. elle permettait donc uh une flexibilité. déjà par rapport à la personne. en termes de rester-à-la-maison ou: de retourner. °h l'autre aspect. ca c'est sur un plan personnel; mais s dans certaines activités aussi; pour moi le covid m'a permis de me rendre compte que pour certaines réunions; qui: elles peuvent être ouvertes au plus grand nombre parce que le coûts étant réduit; uh y a pas à voyager; don, parfois, on pouvait atteindre de plus grandes cibles et des cibles plus variées; dans certaines réunions, par exemple, où cela était important; par exemple, pour sensibiliser s. là où vous deviez parler à un dg vous lui dites de venir avec toute son équipe parce que ça ne vous coûte plus rien. °h donc je pense qu'il y aura forcément une nouvelle façon de travailler après covid. elle sera forcément hybride; télé. et puis: mainenant, dans quel pourcentage; ça dépendra des activités; et des politiciens.

# H, TO

{06:42} oui. oui. je pense que oui. et: ça n'a été la preuve. c'est-à-dire-de quelque chose que l'on supputait-comme je vous disais, on a institutionnalisé ces communications; et c'est quelque chose qui vraiment aurait pu se faire.

In the first excerpt of the interview with B, he did not stress the impossibility but rather a way of adaptation since he spoke about force. So one could assume that if remote work was imposed by force it would be quite possible even if the interviewer does not agree to work entirely remotely and again for personal reasons. We will further resume the advantages and the disadvantages mentioned at the End of this part.

# 4.1.3 Remote working management

Remote working management is a matter of personal organization. Some people had to reduce their free time during remote working. Indeed, many of them answered that they worked more at home and at any hours. In that way, it was difficult to set working hours at X time of the day and moreover when they were solicited by co-workers, so they preferred to work at the same time as them so that they save time. In addition, by dint of worrying about the results they rendered, they tended to do more. They also had to write reports on his achievements online which took even more time.

#### D, PMO

{22:16} i found myself; more efficient. because i had less periods of interruptions. most of the virtual events. even 90 percent and more. they were planned. it was not that often that somebody would just pop in. usually colleagues would ask, when are you available for a call to discuss this or that topic so you could always plan. so my time was more planned. more scheduled. and i could devote dedicated longer time to to work; i wish to focus on because when we are constantly interrupted; uh uh it was it was more difficult. then i found it. i didn't have the the time waste stuff, you need to go to the cafeteria and walk ten minutes to get your lunch; and eat there; and return for me. i found it practical. i was sitting at home on my living room table behind was my kitchen. so frankly; i was not taking breaks. i found it. uh: i found it like a very optimal way for me to work. i don't know if for everybody that could work, but for me that was good. i found that i was able to start earlier; and i was able to finish earlier; and on some occasions. i was able to do more work than if i would stay in the office. but as i say for me, the

blended version of being some days in the office and being some day based at home would be the best option from my experience. thank you.

#### - A, TO

{13:23} with covid they was at home, if you would stayed at home, you worked harder. you worked more because you were not going to prepare to go to the office it's just your office is just next door. right; and then you keep walking walking walking you don't know if sun has set. and uh yeah you may not even be here when you close shop, you have closed and then you go home, maybe you were really very tired. you don't touch the computer again; but at home, you keep on walking, walking walking and realize that it's already night, so you end up putting in more time than before. also: when you are; eh when you are away from the office; sometimes your supervisors think you are not doing enough ok; so they want you to they think maybe you are taking walks. so he's like, you need to be explaining to somebody all the time that you're working, and then you need to be giving reports; so instead of working you are giving reports. hein. do it takes i didn't like it personally hein because i know how to take care of myself or my job. so i don't need someone to be breathing down my back hein and say give me a report give me a repport. so i i prefer walking walking walking; by then if i need to spend part of my week reporting reporting reporting. so every week you have to report what you did last week. is it's not; i didn't like it. plus; some of the walk is the results are not in the week you get results in four weeks, five weeks yeah. so i'm telling you the same thing literally until i as expect my results; to be some of the a challenge. so there's so much we can say about the impact but yeah.

Here we can say that depending on the position, the management is seen differently. Previously we saw that stuf members are more productive but regarding the management of each, remote working is not convenient to each.

# 4.1.4 Remote working performance

On this issue, no one pointed out the non-performance at home. Everyone seemed to be quite productive. On the other hand, external factors, such as dependence on other team members, delayed information, poor internet connectivity, etc., are disruptive to effective online work. There is also the adjustment time at the very beginning of the pandemic and the containment. They all mentioned that it was difficult to adapt,

especially to the use of online work tools. Everyone's performance was influenced during this period.

# - G, PMO

{12:58}yes. ye:s; because the biggest part of it is if one loses time. i it means you take too long then to implement, for example, i implement; 18 projects simultaneously. and; if i'm losing time on one project; losing time on the other losing time on the other just to implement it. things slowed down a little bit uh: so yes even affected implementation. but if you're looking at the overall impact; i do find the net effect was that; there was really no net negative impact. as i say for me it was just the beginning to get organized around ok. how do i then get with my colleagues in chad. what's the best way. was the best timing; and then i began to make sure that; you know people understood. i was working from home. so they understood they were also working from home. so we began to work together; and communication was a key part of it. to work together around saying ok. how do we keep things moving. get the t-o online; get the counterpart online; get online at the same time and then you know have a meeting like we used to. but it took time to get to a comfortable position; with all of this. uh: which means at the beginning yes; we lost time as we were trying to get organized. so; yes some some bit of time lost and therefore lower implementation of projects; and overall, uh the net effect was zero. because once we got going, then uh: it was a new way of doing things altogether.

# H, TO

{09:51} c'est ce que je vous disais: et je pense qu'on est plus performant. paradoxalement; et: je pense que tout le monde vous le dira; °h parce qu'on est plus concentré parce qu'on est plus créatif parce qu'on organise son temps parce qu'on n'a pas de bruits parasites. ça c'est c un peu important surtout avec ses; moi je n'étais pas du tout habitué à travailler la porte ouverte c'est quelque chose qui: vous voyez vous même aussi; vous l'avez fermé la porte et c'est important. uh et: c'est quelque chose qui: qui me gêne et que j'ai pas retrouvé à la maison. donc, ça s'est très bien. je pense qu'on augmente ses performances à condition de savoir qu'on va tous un jour °h pouvoir avoir une réunion vraiment présentiel.

The performance could be relatively positive or negative due to the advantages or disadvantages they faced. In general most of the interviewees mentioned the advantage to emphasize their performance.

## 4.1.5 Remote working tools

Everyone was unanimous on the fact that Cisco Webex and Teams were the tools used for online meetings. The agency has a license for these two tools and discourages the use of other tools such as Zoom for reasons of security and confidentiality. However, it happened that the people with whom the staff members of the agency work and who live abroad could not use these tools. Also, some countries organize meetings in which they attend with other tools. Obviously, they mention the tools as cell phones, e-mails, office phones etc but no one mentions the PCMF plattform which is also an internal communication tool, since they can find some information about the project.

# F, PMO

{02:36} oh:: °h i think uh: you know, within the agency here most of the things we use especially online communications uh:(-) have to do with. also we have to look at the security implications and how secure those uh°h platforms are; so the first one that was licence for us to use here was the webex, the cisco webex; you know which is very much in use today we are still using and then after that u uh the microsoft teams also was launched you know. and these two; yeah; they 're lot of similarities; they have a lot of things in common; you know. but at the end of it all uh: they cannot replace face to face interaction; you know; but then °h they're (.) °h sufficiently in moving the program forward within this uh within this pandemic situation. and they're really, really helped.

#### - I, TO

{02:34} webex ou: similaires. nous. ici, on utilise beaucoup webex, mais il y a eu aussi °h alors toutes les autres uh: je me souvient p le truc macrosoft team; y a eu beaucoup de de programmes. mainenant, je me souviens plus. uhm (-) meeting. et puis: ((...))bon(...) et puis zoom dans zoom, ça existe le mot. [ah oui;]voila zoom c'est celui que j'aime le moins de tous parce qu'avec notre ordinateur il y avait toujours des problèmes de: de de compatibilité.

I, the interviewee, was not sure about the existence of Zoom. The fact that everybody used Webex can be interpreted as the internal rules are respected within the agency as much as possible. I could also realize while responding that there were no further details concerning any details within a project.

## 4.1.6 Conflict management in remote working

As in any type of work, conflicts can arise from moments of misunderstanding or miscommunication. The interviewees seemed to be passive people who try to avoid these situations as much as possible. When they were misunderstood, they either tried to communicate or let it go.

# - F, TO

{16:11}et c'est vrai que je l'ai remarqué dans un pays; h ca ca pas une arrogance, mais du coup; h plus de: pas d'agressivité. mais peut être plus de détermination d' un propos du counterpart. parce qu'il me souvient justement on se battait, uh dire c'est une litote hein. on on on discutait un pti peu:: pas rudement, mais de manière vigoureuse sur le projet. c'était sur l'installation d'un équipement particulier. moi, je trouvais que c'était un petit peu litiGIEUX parce que je j'avais pas toutes les informations et je sentais qu'on ne les donnait pas toutes, notamment sur le mode de financement. et c'est vrai: que def par ce format virtuel. qui: protégeait le counterpart; h il s'est permi: d'avoir une certain uh pas agressivité. mais une voilà. hm des propos, je pense qu'il n'aurait pas tenu si on avait été en virt si on avait été en présentiel. ça, c'est quelque chose qu'il faut vraiment je pense bien bien souligner hein ce ce ce rapport qu'on a différent.

{17:50}bah moi je ne suis pas un homme de conflit, alors peut-être pas la meilleure personne, mais j'ai écouté, j'ai essayé d'influencer. et puis, au final bah: ça: marché. ça dire qu'on m'a donné les informations que je voulais et qui m'ont pas tout à fait satisfait.

On the other hand, some people mentioned that the team members were so understanding that the issue of conflict did not even arise. The lockdown brought them closer together so you really noticed this sense of compassion and support coming from everyone because everything was new to everyone.

## - C, APMA

{20:42} Non. à aucun moment. [ouais] à aucun moment uh: on a fin je dois dire. A aucun moment, je me s serai aperçue d'une situation de conflit. A aucun moment. d'autant uh:uh autant en présentielle On peut trouver des situations de conflit. parce que je pense que: la communication. simultanée. qu'engendre le présentiel engendre aussi uh: parfois une incompréhension. lorsqu'on est en virtuel; on est obligé de uh:m comment on va dire. penser à

l'avance aux messages que l'on veut transmettre, quand on parle. Ce qui implique. Qu'effectivement; on prend peut être plus le temps, au niveau de la communication, on prend plus le temps, pour réfléchir à la communication, qu'on ne le fait en présentiel. Donc moir j'avoue que qu'on s'évite toutes ces incompréhensions qui peuvent aboutir à un conflit. J'avoue que tout le temps qu'on a fonctionné, même chacun à la maison, mais à aucun moment, aucun moment, il y a eu une situation de conflit, au contraire. Au contraire, je trouve que ça rapproché les gens énormément. Le fait d'être chacun chez soi, et le fait d'être en télétravail; ça nous a uh ça nous a beaucoup rapprochés. Tous tous tous ceux du groupe qui travaillaient sur la même chose. On était tout le temps en contact; tout le temps. J'avoue que ça nous a beaucoup rapprochés les uns les autres à savoir comment chacun va; comment chacun se débrouille; uh: Comment ça se passe chez toi; Ça va; si t'as besoin d'aide; Dis moi si; t'as pas le temps;((...)) Voilà, c'était uh: beaucoup plus d'entraide, beaucoup plus de communication qu'on ne trouve quant-on quand on est est uh qu'on ne trouve quand on est en présentiel.

There was also some time of frustration because of the new way of working, the adaptation. They have to learn the way that the information is transmitted, and the bad internet connectivity that reinforces the difficulties.

# 4.1.7 The language barrier

The language did not really cause any particular barrier for the interviewees but this does not prevent us from ignoring this aspect. As most of them pointed out, the language problem has always arisen and solutions have always been found, notably through the simultaneous translation that PowerPoint offers and also some people during the meetings could translate, even though this makes the meeting last longer. For the belingual people, the meeting with the counterparts where quite easy because they could switch easily to french, since they are working the Frechh speaking countries.

## - F, PMO

{24:47}uh: yes and no. the hm ok, i'm working with uh with africa, so we have about half of the region that is french speaking the other one that is english speaking; there is a bit of uh uh portuguese speaking countries as well. so; the the language barrier is always not an issue, but it's a it's a parameter we have to take into account; always. uh:m, they are much the're more. a available expert in all fields speaking english and french; we have in my situation and

we have a lot of the french speaking uh: african countries. uh: to deal with. so we are always dealing with the the language. buduh: in general, we we try and we often we succeed having a uh: communication with the language of the country we are working with. uh:m. so no it was not more an issue that than than before the virtual face to face. we are facing the same, let's say, considerations; we are used to to that. uhm(.) the thing i would say no maybe it could be that the the virtual part could maybe be a bit more uh: easy, for for from the language point of view, because there are things that we could not do before. if you are sending an expert in the field, if the expert is english seaking the communication will depend on the situation in the field. or if you have people able to translate for those(.) local people who do not understand; it will be ok. if you have nobody able t to translate, you will be in some complicated situation. in what we we had done it. it happened that we had a: virtual expert missions; or virtual meetings; with english speaking people. experts. dealing with the: french speaking uhm: counterparts. if there is someone in the distance who speaks. who understands english and speak french, we can we can uh ensure the translation. this is the advantage of the of the the the virtual part is that you can have someone taking uh: uh: place, taking uh taking part in the in the event without having to be to be there, so this happens, we had that this is maybe even uheasier than from that point of view. i know for instance i participated in uh:m meetings that i was not especially supposed to; but uh: as. french speaker. so i could translate for instancethe interactions between our director or D-D-G with some ambassadors or or ministers uh: uh and french speak frompeople from french speaking countries. so this would have been. complicate if it was uh: uh: in person, because i i would not have traveled with the D-D-G with the the director, for instance.

((...))

{28:15} i have to continue with that because they are also in the large well you know, but in the the meetings we have with more with many people; i mean many attendees; then the language can be an issue. because then you can no longer it's complicated let's say to to ensure the translation or it cost a lot. ok we had that recently; in the: induction meeting uh: of or N-L-O, the new N-LOs and N-LAs, we could not ensure a translation, we had the same also in the the last meeting, we could not ensure translation. uh: mainly because it, wa technically it's an issue; it's complicate. uh: and to solve it technically it cost a lot. so the the the cost of doing that is is is an issue in itself. an:d ok. we had we tried that as a maybe one year ago to have one of the staff or staffs intervening translating after uh: each speaker had uh: uh spoken, but it's complicated because it takes time. so it increase a lot the duration of the: of the meetings; which

is also an issue because the the connection is not always easy, but to keep a connection for a long time. it's complicate, very complicated, especially in some of our countri: Z in africa; uhm: so connection is not always an issue not a special issue to keep it good connection good quality connections for a long time it's it's more compli. uhm: and so there could be issue with the language specially with a big uh bigger audience. and now more recently what you saw during the induction meeting uh:, on the webex meeting; if i remember well; we have this webex or team i don't remember. you have the possibility in; during at least the the presentation if your base. if you are basing your your speech on a P-P-T powerpoint presentation you can uh: you can have an automatic translation. only one language. but ok; for africa, it's uh enough in general it's enough uh: because it's either translation in french or in english; uhm: and this is a it's a: very good: a very good technical support uh: we found a: few months ago. uhm: but it's not perfect, but it's its, uh: it's uh: it helped it helped a lot. so. yeah. okay. so from the small audience; i would say language issue; is language is not really an issue; for the bigger audience uh: especially if you go in the. high level in the countries ((..)) you have people not speaking english or french. uh so it could be complica.

((...))

{31:41} i say that. if we have a small, uh: small number of participant. in a meeting. in the distance, i think that the the language issue is not an issue. the it's not an issue because you can quite easily translate what's happening. you can you can uh: take on board someone. else that could uh: that could ensure the translation. but if you have a bigger audience; large audience. uh:: especially in a more formal way. uh: language could be the an issue. because it's more complicate, technically complicated to ensure the translation. that's it. then you have to to to to: uh: (.) use a lot of financial resources to ensure translation. it's possible but it's very expensive.

## I, TO

{08:15} non. pas pour moi; pas pour mes pays; parce que donc moi. j'ai uh: j'ai des pays anglophones et francophones; donc je peux communiquer sans problème. dans les deux cas. or il est possible que d'autres, dans notre cas que ce sous soit différent. mais moi dans mon cas, ça n'a pas été le cas. [ouai] du tout. après moi je pense que la si elle existe cette barrière linguistique; elle est certainement plus difficile; à a:: franchir quand elle est quant on est en

virtuel que quand on est en en réel, parce que y a des choses qu'on peut se dire beaucoup plus facilement en tête à tête que sur une ligne téléphonique qui peut être dérangeant donc une ligne internet. donc donc, logiquement, votre issue est juste, mais dans mon cas, il n'y a pas eu de problème.

Whether one is bilingual or not, language can be a problem in virtual communication. Not only can't you read body language easily, but you can't always translate because of the high costs. In a multicultural environment like their projects, and since communication is the foundation of the efficient project, it is important to make sure that the information is really well understood.

## 4.1.8 The objectives achievement

All interviewees said that the goals have not been achieved, despite the fact that some pointed out that they were more productive. This means that remote working has some shortcomings that still need to be performed. At the same time, not everything could be done remotely. In this case, visiting the countries is necessary, then working in the office also facilitates communication within the internal members since people are used to face to face and the body language is easily readable.

#### D, PMO

{26:26}yes; uh: and actually to the bigger expanse; my answer is yes; and is as earlier mentioned only for some cases. it was not possible because; some events really need to be face to face. i have for example, a regional project in human health, which is a big project with lots of PLANNED activities; lots of group activities; and regional training courses so even though we planned to organize this, unfortunately this was not possible. because it involves people travelling from 10, 15, 20 countries "hto another country; so so this required a lot of uh: this had lots of challenges because many countries were in lockdown. or if one country is not the other country may be; so so in such cases, we have not yet been able to implement the clinical part of the activities. but still. we are not sitting in the waiting for the situation to change; we had project team discussions and we decided to adapt; the working plan. whenever possible. and adapt the sessions, for example, have part of the session virtually when this refers to theory; and do the clinical part as soon as borders are open as soon as these regional events are open; in my portfolio, i also have a lot of uh long term fellowship trainings; and i should say that the majority of them have worked very well; they were placed without any delay; and i think this is

because that uh: it seems that member states are much more willing to take long term fellows; even if there is some initial; isolation; to stay calm for 10 days or two weeks. the fellows could do and then start their training programs which are for six months; one year; two years; or more. so; frankly in terms of performance; and landside, we have managed to achieve more; by having more meetings which brings uh additional achievements to the program by bringing more stakeholders; by being involved; in more virtual events because this gives us more exposure. and on the other hand, some activities are lagging behind; because of these clinical aspects or aspects which really must be done face to face; so we continue following up. but i would say may be hum: it's difficult but maybe 80 to 90 percent of the objectives have been achieved; and also as i say we we have had new; contributions. which were not planned before the pandemic. but thanks to the virtual tools this was possible.

Here, D mentions that his objectives were achieved by his side. But some training courses have not been implemented. That means the project objectives she mentions, in its whole, have not been achieved since it requires in addition travelling of fellows that were not possible. She mentions approximately that 80 to 90 percent of the objectives projects have been achieved. She mentions that they did the first part of the fellowship virtually and then planned to travel for the practical part as soon as possible. Is this theoretical part efficient? We are going to see this further in the survey analysis.

The question about the advantages and disadvantages of remote working was answered in the question, so that most of the time, I did not have to ask them afterwards.

# 4.1.9 Remote working advantages and disadvantages that was raised by all the participant:

Following the situations related by each participant, I elaborated the advantages and disadvantages of remote working, common to all participants.

Advantages Disadvantages
--------------------------

# Way of working

- Participants where already used to remote working with externals (Communication with counterparts and NLOs)
- Reduced costs of meetings instead of making everyone travel

#### **Tools of communication**

- Adapted and learn how to use the main tools
- Same accessibility as at the office
- Virtual tools are now formal

## **Working Management**

- Personal organisation
- Scheduled set
- Flexible working hours
- Higher concentration
- Creativity developed
- Meetings set at everybody's convenience

## Communication

- More objectivity while communicating
- More patience and passivity

## Way of working

- At the beginning, people need time to adapt because it is not common.
- Dependence on other team members
- Cannot travel to the countries

#### **Tools of communication**

- Internet connectivity issues
- Technical issues
- No familiarity with certain tools

# **Working Management**

- Less human interaction
- Cannot travel to the countries
- Procurement cancelled or slowed down
- Not all the trainings can be virtual
- Traveling where not possible
- No distinction between Family and professional life.

#### Communication

- Slow communication: long wait to receive information
- No direct communication

This table shows that there are as many advantages as disadvantages in remote working. This may affect the project effectiveness and achievement. Regarding how the projects are planned, some training courses which were supposed to take place face to face are now virtual.

# 4.2 Survey analysis

In order to study the effectiveness of the training courses, I have sent an email to 130 participants. With a given deadline of one week, only 22 of them participated in the survey. Regarding this fact I will use the given data for the study.

#### - Data treatment

First of all, each training course belongs to a specific field of activity which it is related to. Then considering the fact that each field of activity is different, the way of achieving the goals are also different. That means some training courses are generally required to be face to face because of the practical based evaluation. For example, when it comes to training people on utilization of a specific machine.

The thematic areas that sample participant training courses belong to are: Water and the environment, food and agriculture, health and nutrition, Radiation Protection and Nuclear Safety.



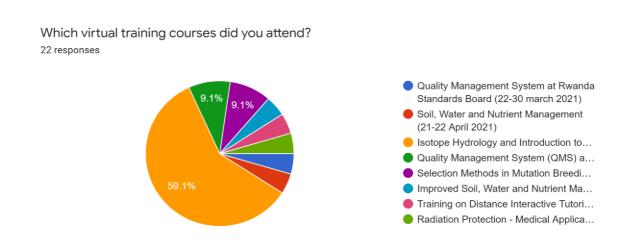
Proportion of the results related to thematic areas in terms of percentage.

In Terms of numbers, there are:

13 participants for Water and the environment,

- 6 participants for food and agriculture,
- 1 participant for health and nutrition,
- 2 participants for Radiation Protection and Nuclear Safety.

The 8 courses selected for the survey belong to one of three mentioned thematic areas.



Results related to the attended training courses

In order to compare the thematic area together I organize the data obtained as follow:

Thematic area	Number of Course	Number of participants
Water and the Environment	1	13
Food and Agriculture	5	6
Health and Nutrition	1	1
Radiation protection and Nuclear safety	2	2

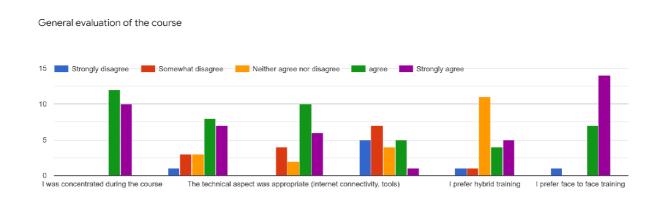
The number of courses here does not correspond to the proposed courses. After evaluating the corresponding number of courses (8 courses) and the number of participants (22 participants) on this table I realized that for one course (Quality Management System (QMS) and ISO/IEC 17025:2017 Requirements in Radioanalytical Laboratory (31 May-11 June 2021)), there is someone who has selected the wrong thematic area. After verification I found out that the course is related to Food and Agriculture instead of Radiation protection and Nuclear safety. So I reorganized the table as following:

Thematic area	Number of Course	Number of participant
Water and the Environment	1	13
Food and Agriculture	5	7
Health and Nutrition	1	1
Radiation protection and Nuclear safety	1	1

Regarding this table, the analysis will be based on the opinion of each of the participants concerning the thematic area and we will see in which thematic area the virtual courses were effective according to the Kirkpatrick model.

#### **LEVEL 1: Reaction**

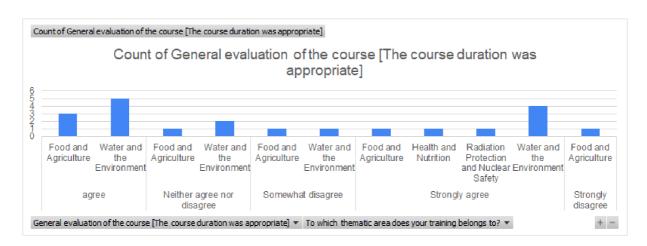
How did the participants feel about the training programme?



## Results of the survey, Level 1

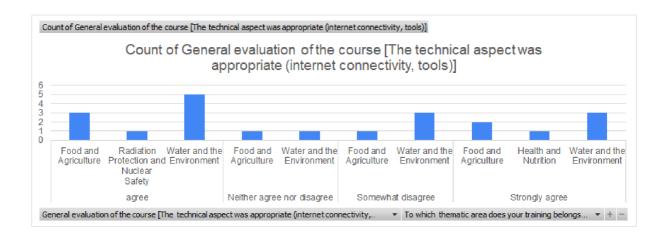
At a glance, all participants were quite satisfied with the course. Also many of them prefer having face to face training courses. Regarding concentration and the face to face training, they answered that they were concentrated and the majority of all the participants prefer having face to face training courses. All checked the box "agree" or "strongly agree".

Since the participant number is not big, I will continue the analysis in terms of numbers instead of using percentage. I gathered all the graphs in annex 3 for a better visibility. For the thematic areas which have more than one participant, I will consider only the majority.



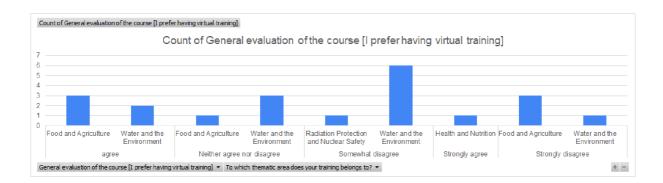
- In water and the environment out of 13 participants, 4 agreed that the course duration was appropriate.
- In Food and agriculture out of 7 participants, 3 agreed that the duration was appropriate.
- In radiation protection and nuclear safety, only one respondent and he strongly agreed with the duration of the course.
- In health and nutrition, only one respondent and he strongly agreed with the duration of the course.

In general, the course duration was appropriate.



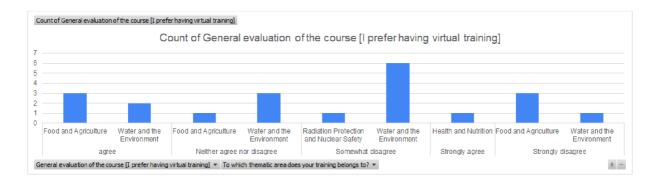
- In water and the environment out of 13 participants, 5 agreed that the technical aspect was appropriate.
- In Food and agriculture out of participants, 3 agreed that the technical aspect was appropriate.
- In radiation protection and nuclear safety, only one respondent and he agreed the technical aspect were appropriate.
- In health and nutrition, only one respondent and he strongly agreed the technical aspects were appropriate.

In general, the technical aspects were appropriate for all the participants.



- In water and the environment out of 13 participants, 6 somewhat disagreed to have virtual training.
- In Food and agriculture out of 7 participants, 3 participants were strongly disagreed and 3 were agree to have virtual training.
- In radiation protection and nuclear safety, only one respondent and he was somewhat disagree to have virtual training.
- In health and nutrition, only one respondent and he somewhat disagreed to have a virtual course.

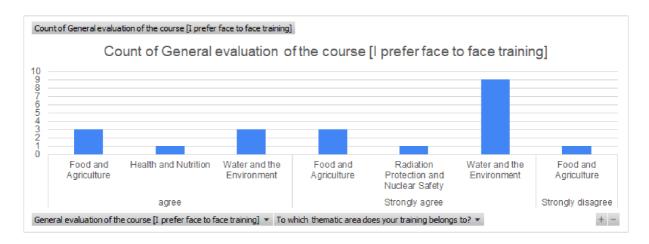
In general, having virtual training course is not really convenient to the participants.



- In water and the environment out of 13 participants, 5 participants neither agree nor disagree to have hybrid courses.
- In Food and agriculture between 7 participants, 5 participants neither agree nor disagree to have hybrid courses.
- In radiation protection and nuclear safety, only one respondent and he somewhat disagree to have hybrid courses

In health and nutrition, only one respondent agreed to have hybrid courses.

In general, their reaction to the hybrid courses is similar to virtual courses. That means hybrid courses are not really at their convenience.



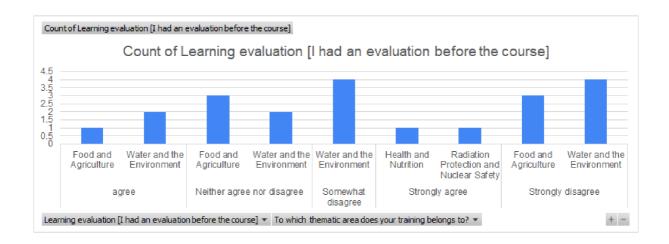
- In water and the environment out of 13 participants, 9 participants were strongly agreed to have face to face training courses.
- In Food and agriculture out of 7 participants, 3 participants were agreed and 3
   were strongly agreed to have face to face virtual courses.
- In radiation protection and nuclear safety, only one respondent and he agreed to have face to face virtual courses.
- In health and nutrition, only one respondent and he was strongly agreed to have face to face virtual courses.

In general, all participants prefer having virtual courses.

To answer the first level question, we can confirm that the participants were satisfied with their virtual course for all thematic areas. The course duration was appropriate for the majority. They were not totally closed regarding the virtual course and if they had to choose, the majority would have preferred to be face to face with the lecturer. The technical aspect did not prevent them from participating in the virtual training course. Everything was done to ensure that the course went well.

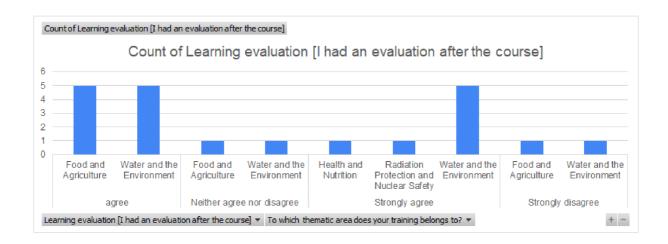
#### Level 2 : Learning

To what extent did the participants improve their knowledge, skills and change attitudes as a result of training?



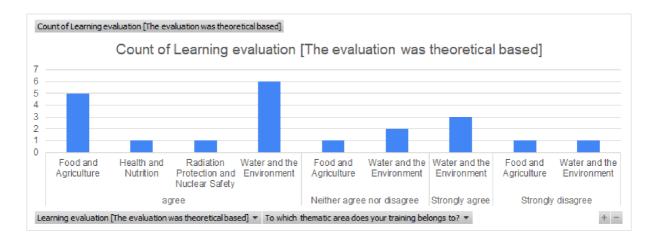
- In water and the environment out of 13 participants, 4 participants strongly disagreed and 4 somewhat disagreed that there was no evaluation during the course.
- In Food and agriculture out of 7 participants, 3 participants strongly disagreed and 3 Neither agree nor disagree aluation during the course.
- In radiation protection and nuclear safety, only one respondent and he strongly agreed that he has been evaluated
- In health and nutrition, only one respondent and he strongly agreed.

We can say that there was no official evaluation before the courses related to the thematic areas Water and the environment and food and agriculture. On the opposite, the participants for the last two thematic areas have been evaluated before.



- In water and the environment out of 13 participants, 5 participants where agree and 5 where not agree that they had an evaluation after the course.
- In Food and agriculture out of 7 participants, 5 agreed that they had an evaluation after the course.
- In radiation protection and nuclear safety, only one respondent and he strongly agreed that he had an evaluation after the course.
- In health and nutrition, only one respondent and he strongly agreed that he had an evaluation after the course.

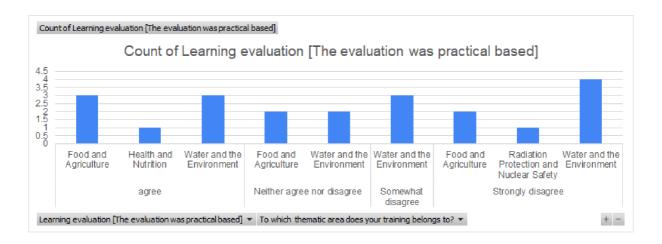
Compared to the above questions, the majority of the participants of all thematic areas have been evaluated after the courses. This seems logical to know how much they have acquired after de course delivery but in fact, having evaluation also before allowed the lecture to know already the level of the participants so that he could have adapted the course.



• In water and the environment out of 13 participants, 6 participants agreed that the evaluation was theoretical based.

- In Food and agriculture out of 7 participants 5 agreed that the evaluation was theoretical based.
- In radiation protection and nuclear safety, only one respondent agreed that the evaluation was theoretical based.
- In health and nutrition, only one respondent and he agreed that the evaluation was theoretical based.

For the majority of the courses, the participants had a theoretical evaluation. In a technical field, especially when the course is delivered virtually, it seems logical to have a theoretical based exam. Was this strategy a way to ensure the performance of the participants after the course? We will know this at the end of our analysis.



- In water and the environment out of 13 participants, 4 participants strongly disagreed that their evaluation was practical based.
- In Food and agriculture out of 7 participants agreed that their evaluation was practical based.
- In radiation protection and nuclear safety, only one respondent and he Neither agree nor disagree that the evaluation was practical based.
- In health and nutrition, only one respondent agreed that the evaluation was practical based.

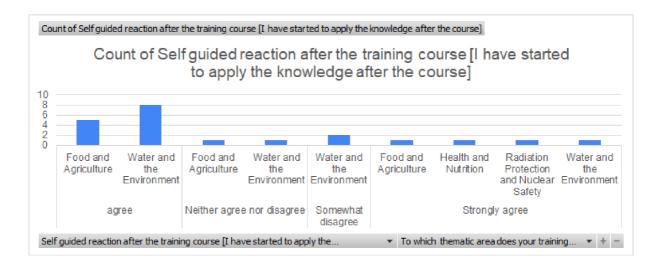
This part could be interpreted as some thematic areas had theoretical and practical based exams, but it seems still not clear regarding the thematic area related to food and agriculture, the participants' responses are not related to the previous question. Previously, the majority said that the evaluation was theoretically based and here 3 of

them confirm that the evaluation was practical based. They may have both kinds of evaluation.

As can be seen for most of the courses, there was no evaluation before the classes and the evaluation that occurs after the courses were theoretically based. To go deeply, we see that for thematic areas of water and the environment, and In radiation protection and nuclear safety, they had theoretical based evaluation whereas for food and agriculture as for health and nutrition, they had both kinds of evaluation. Given these points, whether the evaluations were only theoretical or they were both theoretical and practical.

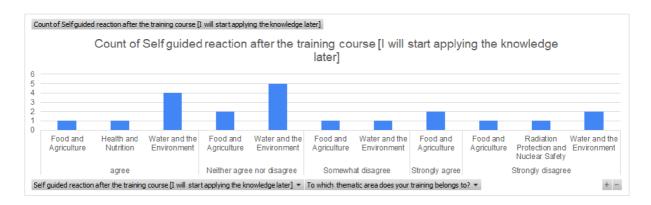
#### Level 3

To what extent did the participant change their behaviour back in the workplace as a result of their training?



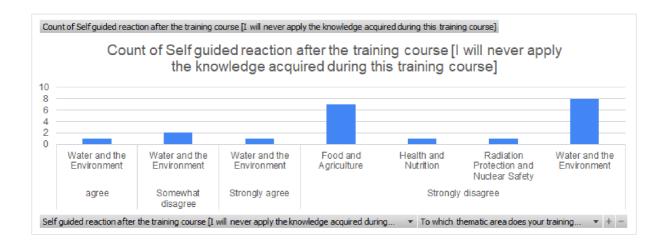
- In water and the environment out of 13 participants, 8 participants agreed that they have started to apply the knowledge after the training course.
- In Food and agriculture out of 7 participants, 5 participants agreed that they
  have started to apply the knowledge after the training course.
- In radiation protection and nuclear safety, only one respondent and he strongly agreed that he has started to apply the knowledge after the training course.
- In health and nutrition, only one respondent and he strongly agreed that he has started to apply the knowledge after the training course.

Considering that the main objective of a training course is to apply knowledge independently, we are already able to confirm with these responses that the majority of the training participants for all the thematic areas applied their knowledge. Thus one objective has been achieved. But to go further, it is not only about applying the knowledge but satisfaction of the result.



- In water and the environment out of 13 participants, 5 Neither agree nor disagree that they will apply the knowledge later.
- In Food and agriculture out of 7 participants, 4 agreed that they will apply the knowledge later.
- In radiation protection and nuclear safety, only one respondent and he somewhat disagree that he will apply the knowledge later.
- In health and nutrition, only one respondent and he strongly said that they will apply the knowledge later.

For this question, the participants' answers are in line with what they answered previously. We can interpret the fact that they have applied the knowledge right after the training course and they are still continuing to apply it. For water and environment, radiation protection and nuclear safety and health and nutrition, the application for later may not be necessary.

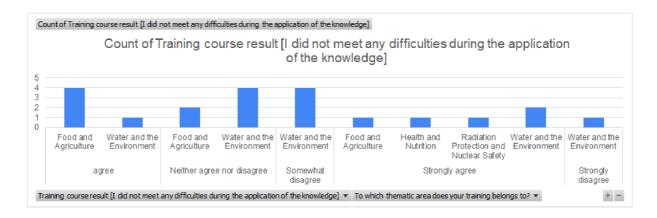


- In water and the environment out of 13 participants, 8 participants strongly disagreed that they will never apply the knowledge.
- In Food and agriculture out of 7 participants, 7 participants strongly disagreed that they will never apply the knowledge.
- In radiation protection and nuclear safety, only one respondent strongly disagreed that they will never apply the knowledge.
- In health and nutrition, only one respondent and he strongly disagreed that they will never apply the knowledge.

In response to this question, the majority of the participants strongly disagreed, which also advantages the project managers implementation. But there are still some flaws since a few people strongly agreed, agreed and somewhat disagreed that they will never apply the knowledge. This means that the training course did not have any impact neither for the country of implementation nor for the concerned participants themselves. The reason may be the fact that the real need of the projects have not been met, or even because all conditions were not in place to allow the participants to apply. Many hypotheses could be elaborated to explain this reason.

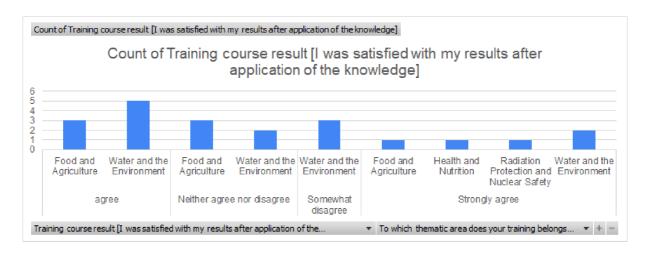
#### Level 4

What organizational benefits resulted from the training?



- In water and the environment out of 13 participants, 3 participants Neither agree nor disagree, and 3 participants somewhat agreed that they met difficulties while applying the knowledge.
- In Food and agriculture out of 7 participants, 4 participants agreed that they met difficulties while applying the knowledge.
- In radiation protection and nuclear safety, only one respondent and he strongly agreed that he met difficulties while applying the knowledge.
- In health and nutrition, only one respondent and he strongly agreed that he met difficulties while applying the knowledge.

The participants have met some difficulties. The fact of not meeting difficulties after the training courses is not quite obvious. Depending on each thematic area, the participants face more or less difficulties. Thus we can say that, in radiation and nuclear safety, the participants have more difficulties because he were strongly agreed.



 In water and the environment out of 13 participants,5 agreed 3 participants that they were satisfied with their results.

- In Food and agriculture out of 7 participants, 3 participants agreed and 3 Neither agree nor disagree that they were satisfied with their results.
- In radiation protection and nuclear safety, only one respondent and he strongly agreed that he was satisfied with his results.
- In health and nutrition, only one respondent and he strongly agreed that he was satisfied with his results.

They were satisfied after application of their results. That means the training courses have a positive impact for them first, for their country and for the project implementation. According to the results, the training courses were effective. In radiation and nuclear safety as well as for health and Nutrition, the participants were the most satisfied. One more important fact is that nobody disagreed after the application of the result. But here we have to exclude 2 participants because during question 3 for level 1, 2 participants from the thematic area water and the environment said that they will never apply the knowledge. In general, 90,90% of all the participants have had satisfying results, which is encourage able. So, we can say that these national training races that took place in 2021 were a success.

#### 5. Discussion

# 5.1 Findings

As can be seen in the literature section, working in a project requires a certain organization, a certain success and adequate communication, which is the most important.

During our analysis of the interviews, we found that the two dimensions of work in the team of staff members were indeed present. Then the remote work adds another dimension, so an additional difficulty. This explains the fact that all the interviewees, including the participants of the training courses, had difficulties at the very beginning. For the interviewees it is about the adaptation time to continue at the same rhythm as before and for the participants it is about the concentration during the course. This could also explain the difficulties they encountered during the application of the acquired knowledge.

Regarding the distance work in this particular team, we can say that the distance work is quite possible, but with some restrictions, as we can see, it has had some limitations. The objectives were not 100% achieved although the lockdown has been going on for more than a year, we can say that the staff members have had time to adapt and adopt new methods. However, there were some things that could not be done remotely even with all good will. These include the disadvantages mentioned in the table in the previous section. So covid showed us that unfortunately not everything can be virtualized. For evidence, the majority of projects slowed down and some training courses do not to take place.

In the other hand, the staff members have managed their new way of working well. That is to say their organization. From this point of view, the advantages are relative to each individual. For example, for those who live alone and for those who live with their family. Each one of them proposes that in the future it would be necessary to work in a hybrid way which is quite feasible and normal since they are more productive at home when they have to accomplish certain tasks.

Henceforth, communication in remote work does not bring necessarily additional complication. Today there are techniques to spot body language in the digital world. There are methods of virtual communication that are adaptable to the situation of each project. In particular, the fact of organizing regular meetings, the fact of expressing oneself clearly with the right person at the right time and giving information in a transparent way. Within the agency there were already rules of communication that people respected. This may explain the fact that no one emphasised the multiculturalism, which could be a problem in other teams if it was not made clear from the start of the project. Despite the multiculturality and multilingualism that exists within the team, language has not been a barrier. Working in a multicultural team requires multicultural skills to be seriously considered. All the participants admitted that they always found solutions to make themselves understood in an effective way. We can see that it is a team that helps each other and tries to avoid conflicts as much as possible, or even if they do occur, they try to avoid them.

Regarding the few training courses that took place, the objectives of the course were relatively achieved for all the thematic areas, but it was not obvious from the beginning. The participants admit to having difficulties from the beginning and especially when they were alone at work afterwards to apply the acquired knowledge.

To answer our problem, we can say that the strategy of working at a distance used by the team was:

- Ensure that the necessary tools for virtual work were available;
- To ensure the well-being of each participant;
- To organize regular on-line meetings;
- Some participants had to write a report in addition;
- Awareness of multiculturality and multilingualism;
- The great importance given to communication;
- Communication basis rules are set:
- The organization of face-to-face meetings as soon as possible;
- The evaluation of the participants although the course was virtual.
- The use of secure virtual tools: licence got for Microsoft Teams and Cisco WebEx.

#### 5.2 Limitations

During the analysis of the results, it is clear that the participants gave their best to achieve some important results. However, due to confidentiality clauses it is difficult to have specific information for each project and each detail in order to be able to analyse the impact in depth.

It was also necessary to have the opinion of the counterparts and NLOs, because even though they are externals, they are members of the project.

For the survey it was necessary to interview the lecturers, and to compare the results with their end-of-course reports. A specific analysis for each course would have made the research method much more efficient. But this is again subject to confidentiality. Then, the data collected is not sufficient to effectively compare between the thematic areas. This would have made it possible to evaluate the effectiveness of a course at the level of the field of activity. Except that again, the difficulty here is the fact that there are already several courses and the disproportionality of the number of participants would not be as effective. Therefore, we can consider that the survey has been filled out honestly by the participants. In fact, this could be verified by the technical officers when they travel to the country to see if the knowledge has effective been applied and followed by satisfying results.

It should also be considered that an interregional and regional project that involves several countries cannot be carried out 100% face to face. Face to face meetings is necessary. On the other hand, it is not possible to ask all actors to work in the same place together during the whole project cycle. Therefore, it is necessary that each project manager has skills and years in virtual communication since communication is the basis of the project and it is following an adequate communication that the project is planned and implemented.

Nevertheless, the expected results in both cases are quite acceptable. That is to say, the objectives were reached at more than 50% for the staff members and for the national training course participants.

## 5.3 Proposition:

In view of the findings, it is possible to improve some of the disadvantages in order to permit each individual to find his or her balance in the distance work and you can provide the information and perform the tasks necessary to achieve the objectives.

In the long run it will be necessary to consider the major disadvantages that is the Internet connectivity. With the exponential evolution of technology nowadays, we can expect a greater connection speed very soon. It is already an advantage for the team members to have intercultural skills but learning virtual body language will be necessary. In addition. Since some people are more active at home than in the office, implementing a system that allows regular work at home will really benefit them. In this way, they can more easily improve their performance by working at home and at the office. All the people interviewed suggested this.

#### Conclusion

Communication is the foundation of good project management. In the context of this study, this is particularly true of virtual communication. As we have pointed out in our analyses, although the interviewees are already used to working virtually, they have faced certain difficulties that have slowed down the achievement of their objectives due to the confinement. In relation to the fields of activity of the projects, some projects cannot be implemented 100% in the virtual.

Despite the limitations of the research, we were able to identify research methods that were suitable for the team's work. After observing satisfactory results, we identified points that constitute a virtual communication strategy applied by this team. We can thus say that the team members had an appropriate working method in addition to a good personal organisation.

This communication strategy can be applied to any type of project. However, as far as the survey is concerned, obviously not all projects absolutely require the dissemination of online courses. But this Kirkpatrick evaluation method is applicable to all types of courses, both face-to-face and face-to-face.

We now know that virtual communication is not enough to complete a project. Could the same be said of face-to-face work?

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#### Annexe 1

#### **Interview Guideline**

## Project Management Officer, PMO Guideline: English

- 1. How were the projects managed before and after the Covid19 pandemic?
- 2. What are the main virtual communication tools you used?
- 3. How did you manage remote working during the pandemy?
- 4. Do you think your project management could have been done remotely all along?
- 5. What were the difficulties you have encountered?
- 6. How did the pandemic situation that imposed virtual work affect your work?
- 7. Has language been a barrier in the field of virtual communication, especially in the intercultural context?
- 8. What were the advantages of remote working, related to your field?
- 9. Were there moments of misunderstanding or even conflicts?
- 10. How did you manage the conflicts?
- 11. Were your objectives achieved?

## Project Management Officer, PMO Guideline: French

- 12. Comment étaient géré les projets avant et après la pandémie du Covid19?
- 13. Quels sont les principaux outils de communication virtuelle dont tu t'es servi?
- 14. Comment as-tu géré le télétravail ?
- 15. Penses-tu que la gestion de tes projets aurait pu se tenir à distance depuis toujours ?
- 16. Quelles sont les difficultés que tu as rencontrées ?
- 17. Comment la situation pandémique qui nous a imposé le travail virtuel a influencé ton travail ?
- 18. La langue a-t-elle été une barrière dans le domaine de la communication virtuelle surtout dans le cadre interculturel ?
- 19. Quels ont été les avantages du télétravail ?
- 20. Y a-t- il eu des moments d'incompréhensions ou même de conflits?
- 21. Comment as-tu géré les conflits ?
- 22. Tes objectifs ont-ils été atteints ?

- 23. Estimer en un pourcentage approximatif
- 24. Si le travail n'était pas virtuel le pourcentage aurait été estimé à combien ?
- 25. Project Management Assistant PMA Guideline : English

## Project Management Assistant, PMA Guideline: English

- 1. How were the expert missions and training organised before and after COVID19?
- 2. What are the main virtual communication tools you used?
- 3. How did you manage the mission at home?
- 4. Do you think it could have been done at home all along?
- 5. What difficulties did you encounter?
- 6. How did the Covid situation that imposed virtual work on us affect your work?
- 7. Has language been a problem in the field of virtual communication, especially in the intercultural context?
- 8. Were there moments of misunderstanding or even conflict?
- 9. How did you manage the conflicts?
- 10. Did the people who were trained give feedback on the effectiveness of their work?

## **Project Management Assistant PMA Guideline french**

- Comment étaient organisées les missions d'experts et les formations avant et après le COVID19 ?
- 2. Quels sont les principaux outils de communication virtuelle dont tu t'es servi ?
- 3. Comment as-tu géré la mission à domicile?
- 4. Penses-tu que cela aurait pu se faire à domicile depuis tout le temps ?
- 5. Quelles sont les difficultés que tu as rencontrées
- 6. Comment la situation du Covid qui nous a imposé le travail virtuel a influencé ton travail?
- 7. Est-ce que la langue a été un problème dans le domaine de la communication virtuelle surtout dans le cadre interculturel
- 8. Y a-t- il eu des moments d'incompréhensions ou même de conflits?
- 9. Comment as-tu géré les conflits?

10.Les personnes qui ont été formés ont-ils donné des retours concernant l'efficacité de leur travail ?

## Technical officer guideline: English

- 1. How was the projects management organised before and after the pandemic? (with team members in virtual or face-to-face format?)
- 2. What were the main virtual communication tools used?
- 3. How did you manage the home mission?
- 4. Do you think this work could have been done remotely all along?
- 5. What difficulties did you encounter during remote work?
- 6. How did the Covid affect your work performance?
- 7. Has language been a barrier in the area of virtual communication especially in the intercultural team?
- 8. What have been the advantages of teleworking?
- 9. Have there been moments of misunderstanding or even conflict?
- 10. How did you manage conflicts?
- 11. Did your team members give you feedback on the effectiveness of their work?

# Technical officer guideline: French

- 1. Comment étaient organisés l'élaboration des projets avant et après la pandémie? ( avec les membre de l'équipe en format virtuel ou présentiel ? )
- 2. Quels sont les principaux outils de communication virtuelle qui ont servi ?
- 3. Comment avez-vous géré la mission à domicile ?
- 4. Pensez-vous que ce travail aurait pu se faire à distance depuis toujours ?
- 5. Quelles sont les difficultés rencontrées au cours du télétravail
- 6. Comment la situation du Covid qui nous a imposé le travail virtuel a influencé la performance au travail ?
- 7. Est-ce que la langue a été une barrière dans le domaine de la communication virtuelle et particulièrement dans le cadre interculturel?
- 8. Selon toi quelle est la grande différence entre la communication en format virtuel et la communication en format présentiel

- 9. Y a-t- il eu des moments d'incompréhensions ou même de conflits ?
- 10. Comment as-tu géré les conflits ?
- 11. Les membres de l'équipe ont-ils donné des retours concernant l'efficacité de leur travail ?

## Annexe 2

Interview field note

## Α

Interviewer	Nelly Compaoré
Date of the interview	09/07/2021
Name of the interviewee	A
Profession of the interview (Role in the team)	Technical Officer
Location of the interview	Microsoft Teams
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	37:00

# General description of the interview flow, memorable points of discussion:

Explains clearly the different way of working. there were three ways of working, visiting the country, training, and virtual collaboration. It is easier for him to work in the office because of Human contact. The language has always been challenging. Communication is the key to solving conflicts. You work more at home than in the office and in addition you have to write many reports to prove that you are working and you are not supposed to do this if you are in the office.

## What went well

The questions were answered with many details and the person remains open for further in my work details if needed.

# What did not work

## Areas for further exploration

The project counterparts in some countries have been more affected so it was also difficult from their side.

Interviewer	Nelly Compaoré
Date of the interview	10/07/2021
Name of the interviewee	В
Profession of the interview (Role in the team)	Technical Officer
Location of the interview	Zoom
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	29:35

The officers generally work remotely but the covid impact anyway. There were so many virtual meetings that it was hard to stay focused on the whole session for hours. That made the organization difficult because you don't know when to use your break time. He proposes working in a hybride way, that means remotely and non remotely. He took time to explain the multiculturality of the environment and insisted that in any way there is a solution to adapt so that it do not affect the work.

## What went well

#### What did not work

Bad connection at a certain moment of the interview. Sometimes we were not able to hear each other.

# **Areas for further exploration**

He took time to explain the multiculturality of the environment and insist that in any way there is a solution to adapt so that it does not affect the work.

Interviewer	Nelly Compaoré
Date of the interview	12/07/2021
Name of the interviewee	С
Profession of the interview (Role in the team)	Authorising project Assistant
Location of the interview	Microsoft Teams
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	26:14

The interviewee explained very well why she was delighted to work at home. Working from home changes the way of working and brings people together. You learn constantly how to handle the tools. She can definitely work at home but still needs to meet others for direct communication. there were no conflict.

#### What went well

The interviewees were delighted to answer all the questions.

## What did not work

Bad connection at the beginning of the interview and at a certain moment that made the interview longer.

## **Areas for further exploration**

The fellows travelled for the training because they were not under the contract of the agency. therefore they had to complete some supplementary procedures.

Interviewer	Nelly Compaoré
Date of the interview	12/07/2021
Name of the interviewee	D
Profession of the interview (Role in the team)	PMO
Location of the interview	Microsoft Teams
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	29:57

The virtual meeting was a very productive time for the person. She also had training courses that went well. All the objectives she set were achieved except the activities that were planned to be on presential.

## What went well

The person was prepared before the interview. Thus, she answered the question almost without hesitation and was very structured. She tried to propose as many responses as possible.

## What did not work

I was at the office and I was interrupted by another colleague during the interview. Some internet issues and we could not hear each other properly. In the meantime, we had to stop the video in order to be able to hear well.

Interviewer	Nelly Compaoré
Date of the interview	12/07/2021
Name of the interviewee	E
Profession of the interview (Role in the team)	PMO
Location of the interview	Microsoft Teams
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	19:53

The interviewee emphasises on the fact that virtual platforms are not sufficient. but they cost less. On the contrary, that can cause some disagreement due to language and It connectivity. There are no advantages working remotely.

## What went well

The person took time to talk slowly in a very comprehensive way. He tries to give as much as information and remains open for further explanation.

## What did not work

Difficult to stay focused on the interview, it was the end of the day and then it was not a video call. Difficult to catch some words during the transcription.

Interviewer	Nelly Compaoré
Date of the interview	12/07/2021
Name of the interviewee	F
Profession of the interview (Role in the team)	PMO
Location of the interview	Microsoft Teams
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	37:31

F suggests a mix of both methods, but he clearly prefers the face to face one. He insisted on direct contact with people. He talked longer about the language and did not mention any real issue related to it. There are issues of course but a solution has always been found.

#### What went well

He was delighted to answer the questions and tried to provide as much information as he could in order to help with the research. He highlighted some very important points to mention such as the problem that other members could face and also gave his point of view.

## What did not work

The internet connectivity was cut at some point, and he has to repeat the same many times some parts.

Interviewer	Nelly Compaoré
Date of the interview	12/07/2021
Name of the interviewee	G
Profession of the interview (Role in the team)	PMO
Location of the interview	Microsoft Teams
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	25:05

The interviewee was comfortable with remote working. G insisted on the fact of time lost while trying to get organized. The communication was slow but manageable. He mention that sometimes, you have to use every remote communication tool to transmit one specific information.

## What went well

He told funny situations he faced that made the interview very interesting and easier to understand directly if the answer is yes or no.

## What did not work

Bad internet connectivity at the beginning of the interview.

Interviewer	Nelly Compaoré
Date of the interview	22/07/2021
Name of the interviewee	Н
Profession of the interview (Role in the team)	Technical Officer
Location of the interview	Face to face at the agency
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No
Interview duration	32:37

He explains concretely the functioning of the project with many details. Since we were sitting face to face, He already had the questions in front of him and was answering directly so I did not have to ask him except for further clarification. It was difficult at the beginning to work from home, but now he gets used to it and is more productive.

#### What went well

He announces the parts that should be retained by saying "this is important to underline "Towards the end I had to ask questions to get more clarification on the reasons for their travels but as it was not in the context of the performance of the remote work, this part was not transcribed. He even took the time to make a summary at the end of the interview to underline the points he insisted on.

## What did not work

I was not able to hear some parts of the recording.

Interviewer	Nelly Compaoré
Date of the interview	22/07/2021
Name of the interviewee	I
Profession of the interview (Role in the team)	Technical Officer
Location of the interview	Face to face at the agency
Permission for recording	Yes
Permission for usage in research purpose	No
Permission for personal data usage	No

13:51

The interviewee did not feel any difference between working home and at the agency because the device used was similar. Concerning the performance, he mentioned that it could be measured only in the future.

## What went well

Interview duration

1

He got straight to the point with all the questions and within the questions he gave information about the next questions that were planned and that I didn't have to ask him then. The interview didn't last long.

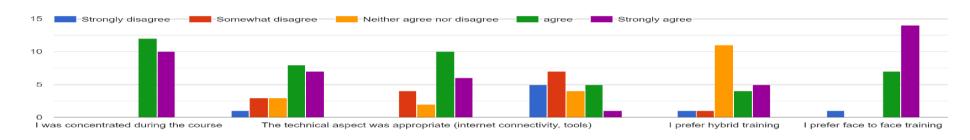
## What did not work

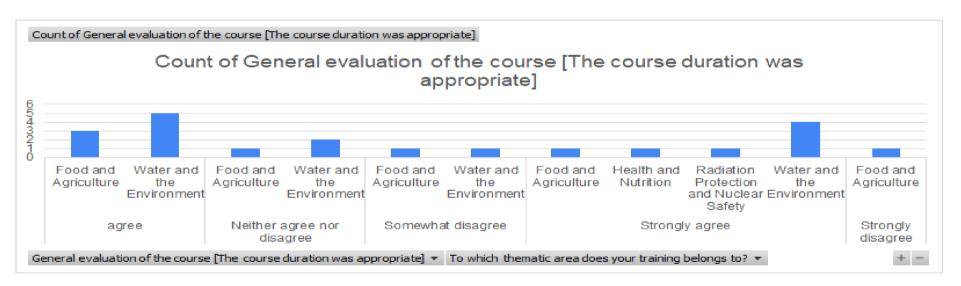
# Annexe 3

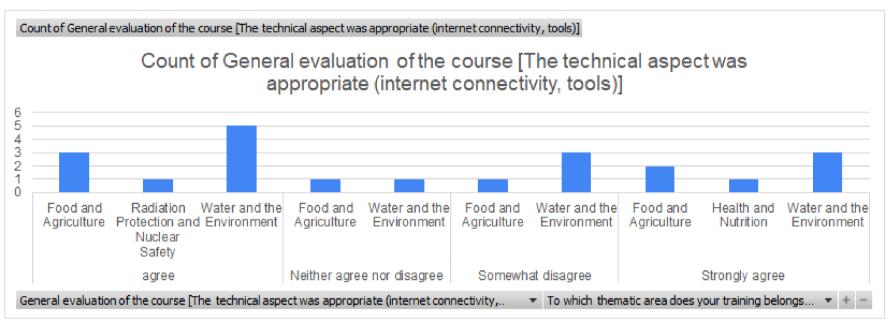
# List of graphs

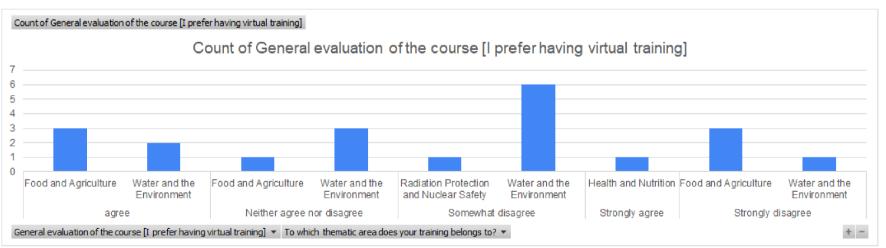
Annexe 3 List of graph Survey Results in graphs Level 1

General evaluation of the course

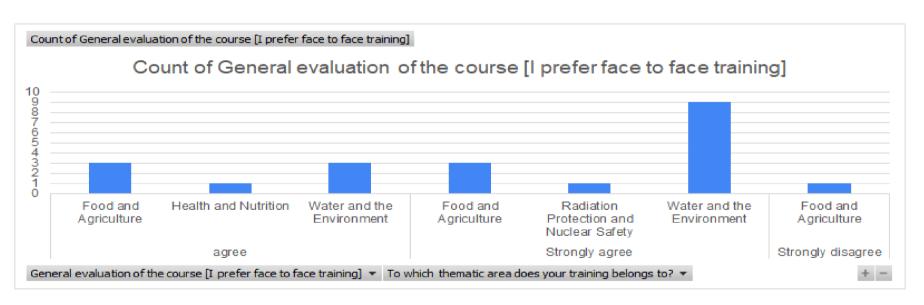




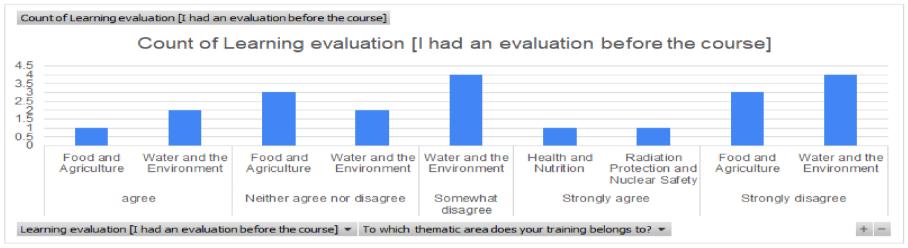


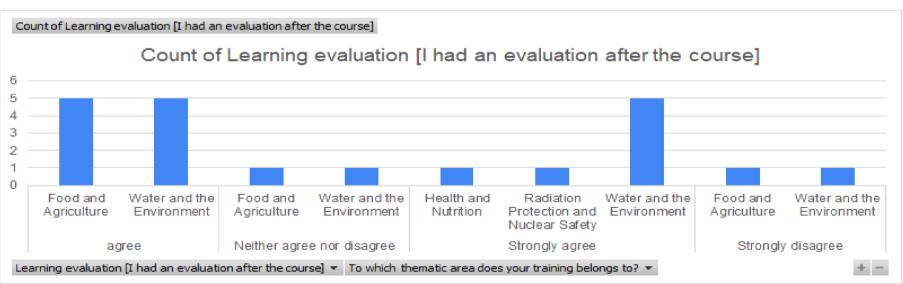


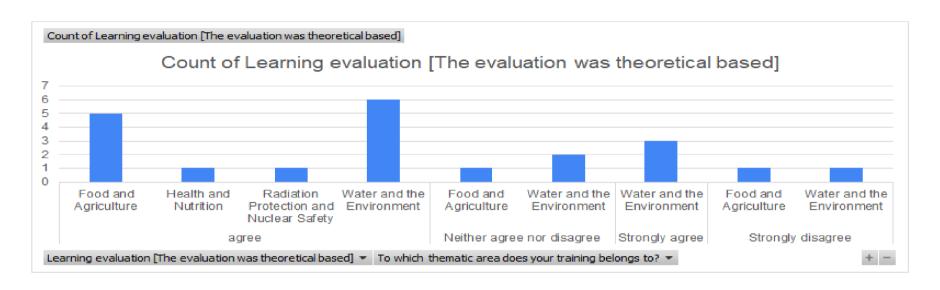


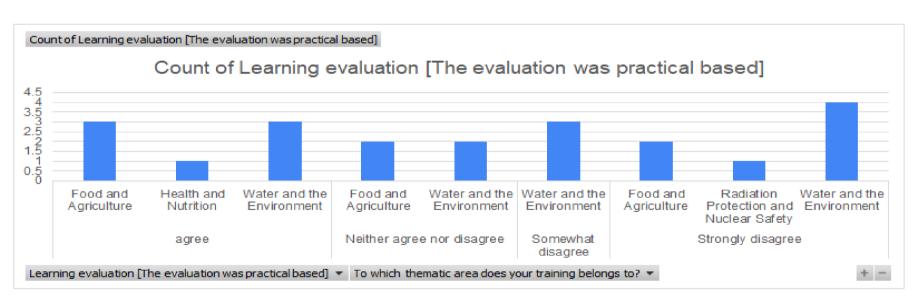


Level 2

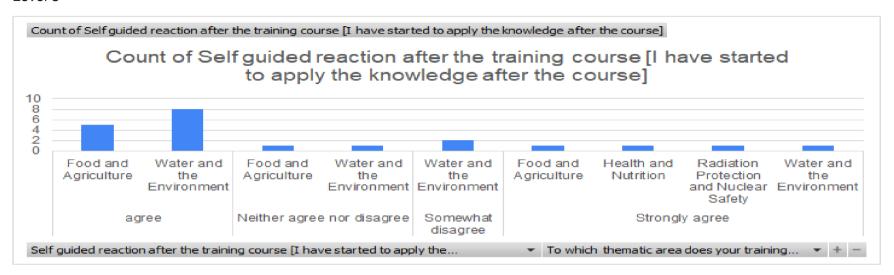


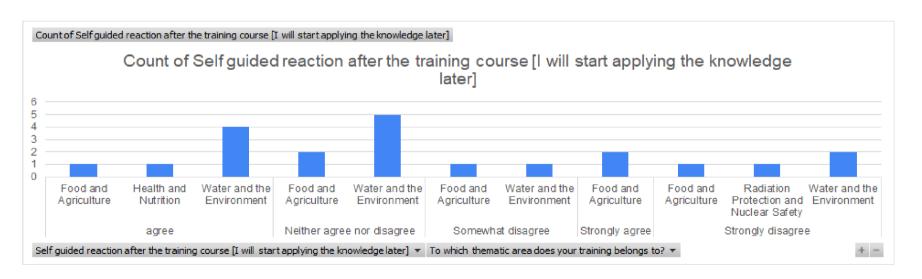


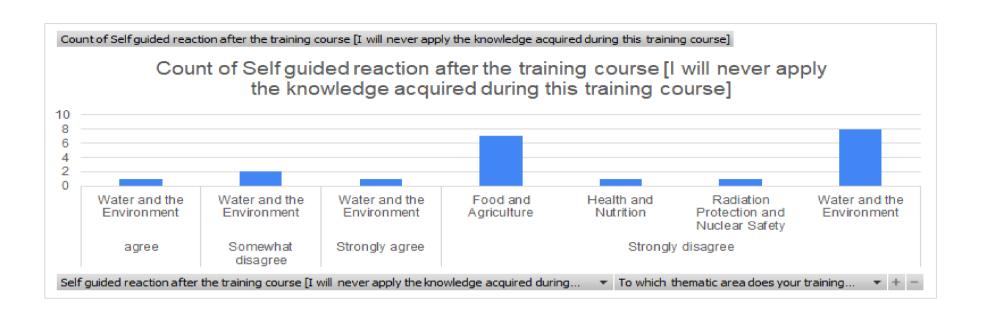




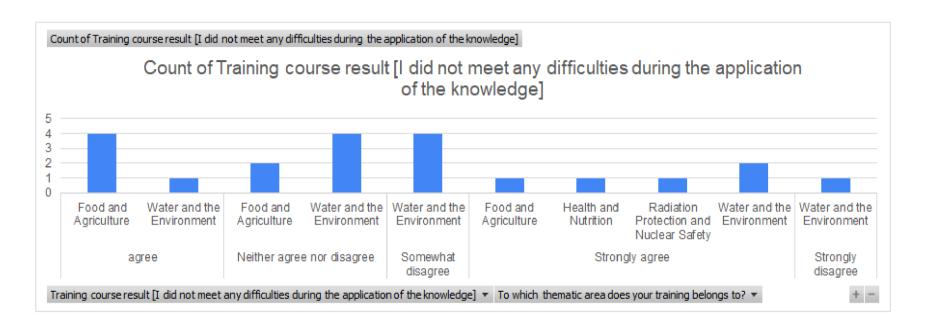
Level 3

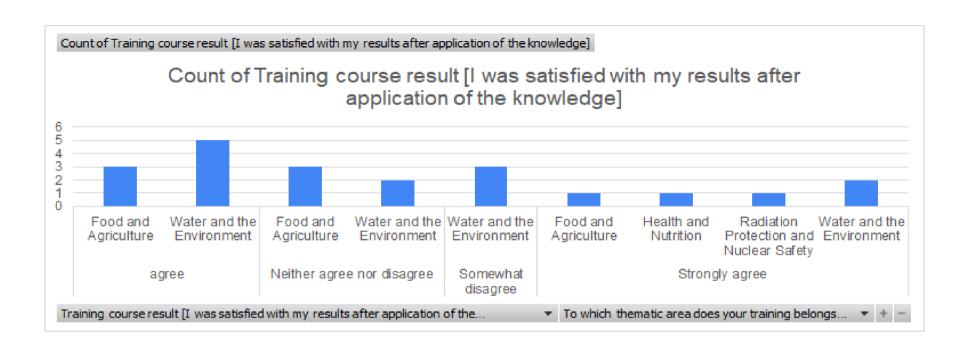






Level 4





## Annexe 4

# **GAT 2 transcription convention Minimal transcript**

Gesprächsforschung - Online-Zeitschrift zur verbalen Interaktion (ISSN 1617-1837) Ausgabe 12 (2011), Seite 37-39 (www.gespraechsforschung-ozs.de)

## 6. Summary of the most important GAT 2 transcription conventions

#### Minimal transcript

## Sequential structure

overlap and simultaneous talk

## In- and outbreaths

```
"h / h" in- / outbreaths of appr. 0.2-0.5 sec. duration in- / outbreaths of appr. 0.5-0.8 sec. duration in- / outbreaths of appr. 0.8-1.0 sec. duration
```

## Pauses

(.)	micro pause, estimated, up to 0.2 sec. duration appr.
(-)	short estimated pause of appr. 0.2-0.5 sec. duration
()	intermediary estimated pause of appr. 0.5-0.8 sec. duration
()	longer estimated pause of appr. 0.8-1.0 sec. duration
(0.5)/(2.0)	measured pause of appr. 0.5 / 2.0 sec. duration (to tenth of a second)

#### Other segmental conventions

and\_uh cliticizations within units
uh, uhm, etc. hesitation markers, so-called "filled pauses"

## Laughter and crying

haha hehe hihi	syllabic laughter
((laughs)) ((cries))	description of laughter and crying
< <laughing> &gt;</laughing>	laughter particles accompanying speech with indication of scope

smile voice

## Continuers

<<:-)> so>

```
hm, yes, no, yeah monosyllabic tokens
hm_hm, ye_es, bi-syllabic tokens
no_o
```

<sup>7</sup>hm<sup>7</sup>hm with glottal closure, often negating

#### Other conventions

```
((coughs))
                           non-verbal vocal actions and events
<<coughing> >
                           ...with indication of scope
                           unintelligible passage
     )
                           one or two unintelligible syllables
(xxx), (xxx xxx)
                           assumed wording
(may i)
(may i say/let us say) possible alternatives
((unintelligible,
                           unintelligible passage with indication of
     appr. 3 sec))
                           duration
                           omission in transcript
((...))
                           refers to a line of transcript relevant in the argument
```

#### Basic transcript

## Sequential structure

 fast, immediate continuation with a new turn or segment (latching)

#### Other segmental conventions

```
: lengthening, by about 0.2-0.5 sec.
:: lengthening, by about 0.5-0.8 sec.
::: lengthening, by about 0.8-1.0 sec.
cut-off by glottal closure
```

#### Accentuation

```
SYLlable focus accent
!SYL!lable extra strong accent
```

## Final pitch movements of intonation phrases

```
rising to high
rising to mid
level
falling to mid
falling to low
```

#### Other conventions

<<surprised> > interpretive comment with indication of scope

## Fine Transcript

#### Accentuation

SYLlable focus accent
sYllable secondary accent
!SYL!lable extra strong accent

#### Pitch jumps

↑ smaller pitch upstep

↓ smaller pitch downstep

↑↑ larger pitch upstep

↓↓ larger pitch downstep

#### Changes in pitch register

<<1> > lower pitch register <<h> > higher pitch register

#### Intralinear notation of accent pitch movements

`SO	falling
´SO	rising
_so	level
^SO	rising-falling
"SO	falling-rising

↑ small pitch upstep to the peak of the accented syllable small pitch downstep to the valley of the accented syllable pitch jumps to higher or lower level accented syllables larger pitch upsteps or downsteps to the peak or valley of the accented syllable

## Loudness und tempo changes, with scope

<<1>>	>	iorte, ioud
	_	Constitution

<<fff> > fortissimo, very loud

<<p>> piano, soft

 <<pp>>
 pianissimo, very soft

 <<all>>
 allegro, fast

 <<le>>
 lento, slow

<cresc> > crescendo, increasingly louder
<<dim> > diminuendo, increasingly softer
<<acc> > accelerando, increasingly faster
<<ral> > rallentando, increasingly slower

#### Changes in voice quality and articulation, with scope

<<creaky> > glottalized

<<whispery> > change in voice quality as stated

# Annexe 5

For	nulaire de consentement
entre	
Fakul Schel	sächsischen Hochschule Zwickau tät Angewandte Sprachen und Interkulturelle Kommunikation ffelstraße 39 6 Zwickau
et	
-	
LL)	naire suivant l'interview ouvec
-	Nelly Compaore 10 (date) 11.07.201
	ent être utilisés aux fins suivantes :
M e	ent être utilisés aux fins suivantes : xclusivement pour l'évaluation du travail
M e	ent être utilisés aux fins suivantes :
<b>⊠</b> e	ent être utilisés aux fins suivantes : xclusivement pour l'évaluation du travail
Die	ent être utilisés aux fins suivantes : xclusivement pour l'évaluation du travail our l'enseignement et la récherche
X t	ent être utilisés aux fins suivantes :  xclusivement pour l'évaluation du travail  our l'enseignement et la recherche  outes les données doivent être rendues anonymes et être conservée de façon anonyme
X t	ent être utilisés aux fins suivantes :  xclusivement pour l'évaluation du travail  nour l'enseignement et la recherche  outes les données doivent être rendues anonymes et être conservée de façon anonyme non nom complet peut être nommé
	ent être utilisés aux fins suivantes :  xclusivement pour l'évaluation du travail  sour l'enseignement et la recherche  outes les données doivent être rendues anonymes et être conservée de façon anonyme son nom complet peut être nommé  e consens expressément

entre Westsächsischen Hochschule Zwickau Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau En soussignant je déclare mon consentement que les enregistrements audios <u>réalisés au cours</u> de Wendpange Welly Compacre 10 (date) 10-07. 2021 Peuvent être utilisés aux fins suivantes : X exclusivement pour l'évaluation du travail D pour l'enseignement et la recherche 💢 toutes les données doivent être rendues anonymes et être conservée de façon anonyme mon nom complet peut être nommé Die consens expressement ie ne consens pas à la publication d'extraits de transcriptions textuels des données dans des articles scientifiques Ce consentement peut être retiré à tout moment Date: 13 107/2021 signature:

entre

Westsächsischen Hochschule Zwickau Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau En soussignant je déclare mon consentement que les enregistrements audio réalisés au cours du séminaire suivant terriew avedopelly (ampacré le (date) M. 07. 2021 Peuvent être utilisés aux fins suivantes : exclusivement pour l'évaluation du travail ☐ pour l'enseignement et la recherche toutes les données doivent être rendues anonymes et être conservée de façon anonyme mon nom complet peut être nommé je consens expressément ie ne consens pas à la publication d'extraits de transcriptions textuels des données dans des articles scientifiques Ce consentement peut être retiré à tout moment signature:

Westsächsischen Hochschule Zwickau

entre

Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau En soussignant je déclare mon consentement que les enregistrements audio réalisés au cours du séminaire suivant-de l'intervien avec W. Nelly Compacre le (date) M.o.t. 201 Peuvent être utilisés aux fins suivantes : 🗵 exclusivement pour l'évaluation du travail D pour l'enseignement et la recherche 🗷 toutes les données doivent être rendues anonymes et être conservée de façon anonyme mon nom complet peut être nommé DX je consens expressément ie ne consens pas à la publication d'extraits de transcriptions textuels des données dans des articles scientifiques Ce consentement peut être retiré à tout moment

#### Consent form

Westsächsischen Hochschule Zwickau

between

Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau and Hereby declare my consent for the audio recordings made during the Interview with on (date) 11.07, 8091. May be used for the following purposes: exclusively for the evaluation of work ☐ for education and research X all data must be anonymised and stored anonymously my full name can be named ☒ I expressly agree ☐ I do not consent the publication of extracts of verbatim transcripts of the data in scientific articles This consent can be withdrawn at any time

entre

Westsächsischen Hochschule Zwickau Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau

et
En soussignant je déclare mon consentement que les enregistrements audios <u>réalisés au cours</u> de
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exclusivement pour l'évaluation du travail
our l'enseignement et la recherche
□ toutes les données doivent être rendues anonymes et être conservée de façon anonyme
🗗 mon nom complet peut être nommé
<b>Ø</b> je consens expressément
☐ je ne consens pas
à la publication d'extraits de transcriptions textuels des données dans des articles scientifiques
Ce consentement peut être retiré à tout moment  Date : 9 2 0 7 2 0 21 signature :

entre Westsächsischen Hochschule Zwickau Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau En soussignant je déclare mon consentement que les enregistrements audios réalisés au cours de l'interview avec le (date) 22.07.9021 W Combacre Peuvent être utilisés aux fins suivantes : exclusivement pour l'évaluation du travail pour l'enseignement et la recherche □ toutes les données doivent être rendues anonymes et être conservée de façon anonyme mon nom complet peut être nommé ☐ je consens expressément ☐ je ne consens pas à la publication d'extraits de transcriptions textuels des données dans des articles scientifiques Ce consentement peut être retiré à tout moment

## Consent form

between

Westsächsischen Hochschule Zwickau Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau I hereby declare my consent for the audio recordings made during the following interview with Nelly Wendpunga Campaore on (date) 2021-07-09 May be used for the following purposes: E exclusively for the evaluation of work for education and research all data must be anonymised and stored anonymously my full name can be named expressly agree ☐ do not consent the publication of extracts of verbatim transcripts of the data in scientific articles

\_\_\_\_ signature : \_\_\_\_\_

This consent can be withdrawn at any time

Date: 2021-07-09

entre

Westsächsischen Hochschule Zwickau Fakultät Angewandte Sprachen und Interkulturelle Kommunikation Scheffelstraße 39 08066 Zwickau

En soussignant je déc séminaire suivant	lare mon conse	entement que l	es enregistreme	ents audio réali	sés au cou
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Peuvent être utilisés :	aux fins suivant	tes :			
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pour l'enseignem	ent et la reche	rche			
☑ toutes les donnée	s doivent être	rendues anony	mes et être cor	nservée de faço	n anonym
☐ mon nom comple	peut être non	nmé			
√ je consens expres	sément				
☐ je ne consens pas	i i				
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_	it être retiré à l		6		

### Annexe 6

## Content analysis: sequential analysis

Interview 1 lead in English

A, TO

Speaker	time	Topic	Memo	Research question
A	{00:39}	The way of working before and after Covid:  On new projects right now. So generally, there are three ways you can do their projects, so I may not have changed much, but one is that some of the IAEA team members, especially in T.C. or even the technical department, visit the country before or during the design of the project. That's one way and then talk to the participants about how the projects are designed: a logical framework, matrix, everything, and sometimes it's not possible to go, but then a group of participants can come to the IAEA for workshops. And then they are trained over a period of time, maybe a week, and then they can also meet the officers and discuss. And then design. The third one, which is even more common, sometimes those two are not possible. Or they were not planned then it is virtual. Absolutely Virtual. PMOs and counterparts work together but virtually. Sometimes they can jump in with a question, with videos or whatever, but it's typically Virtual. So in a sense, the lockdown may or may not have affected the design of the project, depending on which of those three. But let me add that even if there was training in the country still, there will be that virtual part where the TO PMO and counterpart work to design the project. The reason is that it's a process. It takes several months of designing the project from concept to developing it until the end. So there will always be an aspect of it which may not be affected by lockdown.	Explanation was very smooth while responding; Insist on the virtual aspect.  Three ways of working  1. Visit the country 2. training 3. Virtual	He clearly explains that the team is familiar with virtual work and that the 3rd step is the most common. So the situation at Covid19 was less catastrophic.
	{03:23}	The tools of Virtual Communication So naturally, we use formal and informal, the informal one is whatsapp. we do use whatsapp for my counterparts and that is very	WhatsApp WebEx Open to other tools	The agency recommend WebEx, which is considered the formal tool

{04:45}	Remote working management So if it is strictly for interaction with the counterparts, it did not make any difference except for the Internet when the Internet issue. But generally we were able to continue to interact with the counterparts. The problem here is that we were affected the same way as the counterparts. So most counterparts benefit from the Internet in the office. And when there was locked down, then, there was difficulty in communication, so that is in terms of the interaction. We were not able, obviously, to go to the field because of the lockdown and when it comes to how frequently we walk, it was even more flexible because we spent all the time at home and you had no time to close off. Yeah, when the counterpart was available, you would interact with them any time, so it was very productive in a certain way, but depending on the region now if we talk Africa, the time difference is not very. But for other areas like Europe and other Asia Pacific, Latin America is the time difference. So that also provided some flexibility, because if I give you an example of one country in the Pacific when we are coming to the office, they are going home. So sometimes I would talk to them in the middle of the night, which is the best time. So but the communication, again, it goes back, if it comes to the design of the project's communication, was dependent on the three mechanisms that I told you on that were designed mostly, mostly virtual, therefore no significant difference, but where there was need for a visit to the country, then there were some challenges.  The project could have been managed remotely all along: Yeah, no. Cannot be done. OK, I	Affected the same way as counterparts  Accessibility of the used tools at home  Difficulties in communication.	Challenge:  The organization is relative to the availability of counterparts. You have to consider the time zone and the accessibility to the internet.  No. Not because the work cannot be done virtually but
	Pacific when we are coming to the office, they are going home. So sometimes I would talk to them in the middle of the night, which is the best time. So but the communication, again, it goes back, if it comes to the		
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	communication, was dependent on the three mechanisms that I told you on that were designed mostly, mostly virtual, therefore no significant difference, but where there was need for a visit to the country, then there		
(07.00)	The project could have been managed remotely all along:		the work cannot be

	to call the Telefon virtual. I don't know if it's yes or no. But before I answer your question, really, sometimes we do teleconferences. So if you regard	or it is expensive to acquire.	He got used to working at the office.
	that as a virtual interaction, that's OK. Now it's expensive because you cannot do it at home. Yeah, it's easy in the office. But there are times when you have to call from your phone, you have no choice. And if the counterpart is not connected to the Internet and then you have to use the non Internet phone call in real life. So no, for me, no. If I had to walk from the office because I have all the tools with me. I have all the equipment, I have all of it if I need to call, I need to call, if I need to arrange a meeting, it is quicker. Sometimes I need to show the counterparts certain documents and sometimes in the past, my office. Now you can have all the Oval Office at home. But I would have preferred that it's done in the office, it is much easier. Plus, in the office, sometimes for the design of the project, you need more than one officer. Yeah, so you are not alone. So when you're working in the office, you could easily meet. And the range and you can walk into somebody's office and say, look, we need to talk to so-and-so, so while we can do what virtually I would prefer. I mean, in the office is not what I would rather that it's actually in the office for me.	interaction in the office.	
{10:05}	Encountered difficulties: The Covid situation affected that you cannot go to the country, to the membership, and because there are many things that are solved by visiting the counterman, for instance, your first question was on design of the product. So if they can't buy these absolutely new ones sometimes we and we are always recommended this pre design visit and design is it. So you go visit, see the situation, see their capabilities, and then you can activate accordingly in terms of the design. But once you already have the project, it's also good to go and see for yourself and then training becomes difficult because we could not place fellows. So that affected our work in many ways because the results depend on people being trained. We cannot send experts if we	Cannot travel to the countries  Cannot make presential courses  Procurement was slowed Work more in the office.	he insisted on the fact that you work hard And spend more time reporting

don't go to train, we usually send experts. ... Another way covid affected us is that we do procurement now, procurement has slowed down so much. Because vlagus challenges and distribution was a problem and delivery. Now, if training and performance depend also on the procurement, then it affects your work in many ways. But the campaign has not arrived. You have no place of employment training and yeah, the other challenge is that. And this is a general problem that if you get a book and equipment from very far or the support is from very far, not within the country, there's no local support. Then because of the lockdown, engineers and technicians cannot go to that country. So if there's equipment which is done, it's repaired or needs to be installed and trained, it would be affected. And that also affects our work in terms of performance and then getting results. Thank you. And actually, with covid was at home, if you had stayed at home, you worked harder, you worked more because you were not going to prepare to go to the office next door. And then you keep walking, walking, walking. You don't like the sign that said. And you may not even be here when you close shop, you have clothes and then you go home, maybe you were really very tired. You don't touch the computer again, but at home, you keep on walking, walking, walking and realize that it's Friday night. And so you end up putting in more time than before. Also. When you are away from the office, sometimes your supervisors think you are not doing enough work, so they want you to think maybe you are taking walks. So he's like, you need to be explaining to somebody all the time that you're working. And then you need to be giving reports, so instead of working, you are giving reports. I didn't like it personally because I know how to take care of myself or my job, so I don't need someone to be breathing down my back and give me a report give me one. So I prefer walking, walking, walking by. Then if I need to spend part of my week reporting, reporting one thing. So every week

	you have to report what you did last week. That is not, I didn't like it. Plus some of the walk is the results are not in. You get results in four weeks, five weeks. So I'm telling you the same thing literally until I expect my results to be someone with a challenge. So there's so much we can say about the impact of this.		
{17:40}	Language barrier yes, well, if you are not, for instance, so good in French, my French is not like yours. So then there would be some challenges here. But it's really the same challenge you face if you also meet the physical. But do we always find a way to communicate in terms of the language when we have, for instance, meetings, virtual meetings? So I don't think they I don't think there were any new developments in terms of language barrier because, of course, or because of working at home. Now, if a yes, it does apply. If, for instance, if you're working with a Francophone country and before you needed another colleague who speaks better French, then yes, that was affected. But then if you have both of you are involved in the virtual meeting, then it's the same. It's not it doesn't make any difference that you, your colleague, might be in one office like you are. And then I'm here. If I speak only English with someone in Burkina Faso and if there's a language issue, then we can help you. So from my perspective, I do not see any significant impact in terms of language barrier coming into all of them.  Does the language affect your	Challenge with French speaking members  Science is universal	Same challenges as in presential Specially for the non-native English members  Language is not a barrier for achievements
	No, for me, no, because we have found a new way to communicate language in a funny way. But like we speak generally of science, I'm a scientist. So science is very universal.		
{15:59}	misunderstandings/conflicts And I did not see any. Normally, conflicts happen, whether it is locked down or not. Of course, when you see each other, sometimes you	Don't answer directly to the questions but he specifies the fact that the conflict	They were moments of misunderstanding but not because of remote working.

{22:08}	cooperate and clarify things and then you can reduce conflict. But sometimes also when you see each other, maybe then body language can know someone else, then you can have conflict. So unless they the situation created stress, which then you become uncomfortable, unusually uncomfortable. Then, yes, conflicts can come in, maybe stress out your own. Yeah, so I did not see and I did not see any significant difference in terms of conflict before or after. When the conflicts, you know, there are reasons, potential conflicts, the reason why they are so they would happen whether you stay in the office. Plus, when I was here, as you know, unbelieve. Right Yeah. Doing by teams or something or or calling each other. Yes, but they are because there are many players in our activities, is not only like TC you have that department, so let's say if I issue the procurement on that, then yes, there might be challenges in the. Yeah, but to answer your question, I did not recognize any significant increase or reduction in conflict because of the lockdown,  But I think it is case by case, to be honest with you. You can't you can't point to a specific way of resolving an issue. So it depends on the conflict and the cause and where they are whether there is a solution or not. So I don't think the conflict will be handled physically because, OK, if you are, if you need to resolve it by meeting physically, then that is not possible. But you could still talk to each other and then resolve it. So I do not have any mechanism to address conflict difference one, if there was no lockdown.	can be reduced if you are face to face with a person.  Try to talk	Conflict can happen in both situations.  Keep communication
{23:23}	Feedback of the others So it depends also on the kind of work that is very good to take note of that. So if, for instance, you are involved in the middle, not give you hypothetical situations. And for me, it was easy for me to whether I report to, but I also had the chance to evaluate people reporting through me, to others. And it can be very challenging, actually, to tell exactly if someone was doing a certain thing. Now, some of the	Difficult to measure virtually Reports are important Give more task if no productivity is shown.	Evaluate others work frequently By Meetings and report.

	people that would answer to me, if you wish, and certainly often organizing meetings. Yeah. So if the meetings are not there, then for sure, you know, that that amount of work was not being done. So what we were doing was to be creative and give them other tasks, reports and all that, that becomes easy to measure and you can tell. But here it's if you are in office, it's easy to talk to somebody and look at what they are doing or they can share with you what you're doing. So for us who are holding regular meetings like every week to to discuss again and to ask people how they are doing and through that, then you can get a lot more information to see if people are actually being what they are doing.		
{25:46}	Addings: Generally, yes, the lockdown has had its own impact because for us, we gone to one of the capacity building in TC right now, so we in that capacity building, but we also participate in research activities. So that even if I leave, the research activities out, our counterparts have been affected so much because either they were in lock down and when they started coming, it was rushed, like, they need to come in phases and if they come in phases, they need to social distance. So not affected performance either way. And then another thing that they really face is the delay in the process of delivery of materials and so on. And that also affected dialogue because customs would be slower to take action. Flights were not available to deliver items, and therefore items can arrive late and they may arrive if they have an expanded period reaching expiry. So that did affect them so much. Yeah, what we had to find creative ways of doing certain things, we had to do some Virtual trainings, virtual trainings, which would address certain areas, but virtual trainings are not the best. And you cannot train someone to drive a car, which you need to sit with them in the car. Yeah, you can teach them to touch this bottom places then they really need to sit with them in the car and then maybe they knock someone and you fix that problem. So for us,	Insist on external affect and other members specially counterpart but also Delay, procurement. Not all the training can be virtual.  Technical issues: Internet  Don't know if others participate or not at the meetings.	

	because we do scientific work analysis is the testing in the laboratory. So the best way is physical training, so of obviously, the Internet is a big problem for counterparts, and if you are holding large meetings, you don't know if someone is actually still on the other side. That does not only for them, it can happen in any meeting of more than two people. So someone could turn on the computer, but he's gotten actually all these other things, so you cannot easily measure that we found creative ways of doing suddenly to assist by asking questions towards the end. And you'd see somebody who did not pay attention or was busy elsewhere. It's all there are many, many things that could be said, many lessons, I believe, by different people and different in different ways.		
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Interview 2 lead in French

#### B: PMO

Speaker	Time	Topic	Memo	Research question
В	{01:00}	The way of working before and after Covid:  Notre travail consiste à faire de l'administration de programmes pour les projets de coopération technique pour le cas de l'AIEA c'est un peu particulier, à l'inverse de la plupart des organisations internationales l'AIEA n'a pas d'administrateurs résidant dans des pays comme résidents, tous à Vienne, et nous avons un portefeuille de pays que nous visitons une fois l'année pour une semaine à 10 jours, en comparaison à d'autres institutions qui ont des représentants qui résident dans les pays, même si c'est une première différence en ce qui concerne cette institution particulièrement qu'il faudra noté, cela veut dire quand même que nous utilisons beaucoup l'internet l'email parce que nous ne sommes pas présents sur le terrain. Mais par contre, toutes nos activités organisées la plupart du temps en présentiel, ca veut dire des cours de formation, les visites d'experts. Les	Travail à distance à cause de la non résidence des agents dans les pays.  Le covid à quand même impacter le déplacement des agents  Les rencontres et les cours sont passés au format virtuel.	Improvisation de la méthode de travail durant le covid.

{05:37}	réunions, ce qui se faisait à distance, plutôt de la partie coordination à travers des emails. Alors, pour les visites, il y avait une visite régulière annuelle de coordination. Voici comment elle s'est présentée avant Covid. Alors depuis le Covid maintenant, c'est devenu pratiquement à 100% impossible d'organiser des événement donc l'impact du Covid, qui nous a d'abord surpris, nous a quand même forcé à repenser les méthodes pour pouvoir mettre en œuvre notre programme. C'est là, donc qu'en plus des emails habituels pour coordonner les organismes, nous avons aussi organisé beaucoup, beaucoup de formations virtuelles. Les réunions virtuelles. les meetings et les workshop virtuels. Donc oui, je dirais que vraiment, il y a eu un avant et un pendant covid. Donc, il n'y avait plus de contact du tout. Cela a aussi inpacter parce que quoi qu'on dise, il y a eu des cours ou des évènements. qui malheusement se sont tennus virtuellement. Et pour cela, nous sommes toujours dans l'attente.  Il y avait une time application de WebEX et Zoom avant pour certain meeting par contre les activités de formation et les visites d'experts se font directement en présentiels.		
{04:25}	The tools of Virtual Communication  Pour ce qui concerne les outils de communication, aujourd'hui, l'offre est très grande. Le WebEx Le Zoom le Teams on été principalement les plus utilisés, par contre, au niveau de l'AIEA de notre institution, c'est plutôt de le webex et le Team; Zoom est une application qu'on peut seulement avoir offline à travers un web browser, cela pour des raisons de configuration et de sécurité internes.	WebEx et Team à cause des garanties de sécurité	
{07:01}	Remote working management: J'avoue que c'était très, très difficile parce que le télétravail nécessitait toute autre culture en rapport avec le travail, alors il y a deux aspects. Je dirais trois aspects que je pourrais noter. Télétravail tout en étant au bureau ou télétravail de la maison	Réaménagement à cause de la logistique qui n'était pas disponible à la maison;  Travailler au bureau à chaque fois que	Difficile de s'adapter à la nouvelle méthode de travail.

	l'autre. L'autre aspect aussi, c'était quel genre d'activité, que ce soit à la maison ou au bureau? Alors, bien sûr, la logistique était plutôt plus facile au bureau qu'à la maison. Parce qu'à la maison c'est tout un réaménagement, tout une autre organisation à faire qui peut impacter sur la qualité de ce qu'on en fait. Personnellement, j'ai plutôt été au bureau à 90% du temps à chaque fois qu'il était autorisé à certains pourcentages du staff d'aller au bureau. C'était mon option préférée et c'est là que la logistique était vraiment au bureau. Donc ça, c'est sur le plan logistique. Maintenant, sur le plan, rapport, même avec notre travail, il a fallu vraiment réapprendre. On devait rester à la maison et apprendre de nouvelles méthodes de travail à distance, essayer de trouver son chemin avec cette nouvelle approche parce qu' à la maison, il y a la TD. Il y a d'autres activités qui pourraient distraire la motion de temps à la maison, au travail. Ce n'est pas la même qu'au bureau. Il y a plus d'heures de pause déjeuner, donc c'est vraiment un bouleversement total et pour moi il y avait une certaine sélectivité, je restais à la maison. Si, par exemple, c'était plutôt ma journée était surtout consacrée à assister de manière active ou passive à des réunions virtuelles. Je pourrais rester à la maison parce que là j'avais plus besoin juste d'écouter ou de suivre une réunion. Mais quand il fallait faire de la production personnelle, écrire, travailler, préparer des rapports, je préférais être à la maison.	l'occasion se présente.	
{10:15}	The project could have been managed remotely all along Je dirais que en tout cas, il y a eu le Covid. Ca été quelque part une opportunité de forcer une nouvelle approche du travail. Aujourd'hui, les enseignements que le Covid a donnés, c'était d'abord (). Parce que nous savons tous que ce changement culturel dans le travail ou dans le comportement est rarement volontaire. Donc, nous avons été forcés de le faire. Les changements difficiles ne pourraient	Il ne répond pas directement à la question. Par contre, B souligne les perspectives envisageables de cette situation: il est maintenant possible de travailler en ligne, il y a des avantages et l'on ne vas pas s'en priver dans le futur.	

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	se faire pour moi que dans la force. Donc je pense que le Covid a été une opportunité d'explorer et de proposer une nouvelle approche de travailler avec le numérique et je pense que. Après Covid, certains de ses réflexes se perfectionnent et restent. Il n'y a pas que des inconvénients. Il y a eu beaucoup d'avantages au télétravail, notamment. Elle permettait donc une flexibilité déjà par rapport à la personne en termes de rester à la maison ou de retourner. L'autre aspect, ca c'est sur un plan personnel, mais dans certaines activités aussi, pour moi le Covid m'a permis de me rendre compte que pour certaines réunions qui elles peuvent être ouvertes au plus grand nombre parce que le coûts étant réduits, il n'y a pas à voyager. Donc, parfois, on pouvait atteindre de plus grandes cibles et des cibles plus variées. dans certaines réunions, par exemple, où cela était important. Par exemple, pour sensibiliser. Là où vous deviez parler à un DG vous lui dites de venir avec toute son équipe parce que ça ne vous coûte plus rien. Donc, je pense qu'il y aura forcément une nouvelle façon de travailler après Covid. Elle sera forcément hybride, télé. Et puis maintenant, dans quel pourcentage? Ça dépendra des activités et des politiciens.		
{13:35}	Ben oui, les inconvénients, il y en a qui étaient techniques, que imagine qui peuvent être réglés. D'abord, la qualité des certaines de communication, c'est très, très difficile. Je pense que pour moi, le plus gros inconvénient, c'était la partie vraiment définir telle période de pause, par exemple, si c'est des réunions, comment quitter ces réunion quand même télétravail nous nous rendons compte après deux heures dans une session, une heure dans une session Il y avait quand même une certaine lassitude parce que on parle avec un écran. Je pense que ça aussi, garder un focus sur le télétravail si c'est pas hybride, c'est un peut difficile. L'autre inconvénient aussi que j'ai trouvé il y avait un bon	Insite à nouveau sur la méthode hybride à adapter. Améliorer la qualité des moyens et des outils de communication	Maitrise des outils de communication virtuel  Adaptation à la nouvelle méthode de travail

	rapport, parfois, n'était plus le même comparé aux plus anciens. On ne savait pas trop si vraiment le message comparé aux présentiels disons passés parce que on a plus aussi l'information sur le ressenti du message. Donc, je pense que c'est quand même une lacune ou un manque comparé aux présentielles, voilà de l'autre côté aussi par la maîtrise des outils. Et je pense que nous en sommes au stade où il y a encore beaucoup à améliorer. Mais déjà, pour la plupart, les inconvénients étaient d'abord techniques. La culture du travail doit certainement être améliorée. Certainement certains de ces peuvent être levés. Il faudrait aussi s'assurer qu'il y a des activités qui seront forcément pas préférable e n travail, il y a des activités qui pourraient facilement le faire et Je pense que c'est peut être là qu'il faut améliorer à l'avenir pour avoir une méthode hybride.		
6:26} 8:05}	Language barrier Alors, la langue? Oui, dans le sens où la partie traduction en communication virtuelle est beaucoup plus difficile pour le moment, notamment par rapport aux outils existants, alors dans le cadre d'une communication présentiel, il y a toujours quelqu'un à côté. Il y a la qualité d'ailleurs de l'écoute qui est beaucoup devenue plus difficile. Et si, en plus, il faut rajouter la partie traduction en télétravail c'est très difficile. Donc, autant, c'était très remarquable. Au départ, nous voyons de plus en plus l'apparition de traducteurs simultanés virtuels qui semble être une des solutions possibles. Si cela est amélioré. Mais c'est vrai que la partie langues diversité de langues reste une question qu'il faudra certainement résoudre. Un télétravail, un travail de groupe sur Internet par rapport à la partie présentiel où on peut organiser un team, qui font que cette question est vraiment minimisée.  Oui, c'est la bonne. De toute façon, cela étant, fait dans autre milieu, non, forcément, au niveau de l'Agence internationale de l'énergie atomique,	Difficultés de traduction mais crois à l'amélioration des outils de traductions simultanées pour les réunions virtuelles.	Les outils virtuels viennent améliorer la situation du virtuel  La langue à toujours été un problème à gérer

	nous avons affaire à un réseau continental. Alors arabophones, anglophones, francophones, lusophones, etc. Et j'en passe. C'est déjà une donne que nous vivons quotidiennement pas liée au covid, c'est internationale et donc la communication a toujours été dans Différentes langues c'est une donnée, ce n'est pas le problème, c'est une donnée que nous avions géré même avant le covid. Mais ici en présentiel on peut organiser , il y a quand même des moyens faciles avec un traducteur simultané, un traducteur dans un groupe aujourd'hui, quand vous allez dans le télétravail, ces outils doivent être perfectionnés. C'est plutôt dans ce sens que je parle. La problématique a toujours dominé, quelque soit avant Covid, du télétravail ou pas. Nous travaillons toujours avec des gens, avec des langues différentes.		
{20:39}	misunderstandings/conflicts Oh, il y en a eu et encore c'était par rapport aux questions antérieures, abord les frustrations. Dus soit à la non maîtrise des outils, avec une nouvelles cultures de travails. Ou à des problèmes techniques. Mauvaise connexion ou bien parfois le brouhaha, le bruit engendré par d'autres participants, par exemple, tous les micros sont ouverts. On pouvait entendre des conversations domestiques dans la réunion. Parfois, la personne principale commençait à parler. l'Internet est partie. Voilà, c'est vraiment tout ces problèmes techniques qui pouvaientt engendrer des frustrations et qui, parfois, mettent tout le monde dans l'embarras parce qu'on ne savait plus ce qu'il faut. Est ce qu'on aura la personne, est ce qu'elle va nous revenir? Comment on continue cette réunion? c'était pas prévu. Donc il faudrait vraiment toujours anticiper que la connectivité est difficile parfois les problèmes techniques et logistiques comment avoir toujours un plan B, donc cela pouvait causer des frustrations effectivement.	Frustration a cause du mauvais fonctionnement technique improviser	Problème techniques  Manque de internet, outils qui ne fonctionnent pas

{22:	des situations où nous avons eu à perdre un présentateur plutôt que quelqu'un. Le meilleur moyen de gérer, c'est que l'organisateur principal pour moi, parmi les lessons que nous avons aprises par exemple, c'est de s'assurer que toutes les présentations sont à sa disposition. C'est de s'assurer aussi que et pour certaines présentations comme les keynote, il s'est déjà compris qu'il connaît déjà des sujets qu'il a discuter avec le présentateur ou qu'il a partagé le concept. ce qui se passe au cas où cette personne est déconnectée on peut continuer. cette personne à une très mauvaise connexion et ne peut pas faire	Mettre a disposition toute les presentations  Discuter le sujet en avance de sorte à ce qu'on puisse continuer en cas de déconnexion brusque	Savoir anticiper et avoir un plan B en cas de problème technique
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## Interview 3 Conducted in French C, APMA

Speaker	time	Topic:	Memo	Research question
С	{04:15}	The way of working before and after Covid:  Alors, pour ce qui est des bourses de formation, ce qu'on appelle les fellowship, les bourses de formation avant ou après le Covid, on n'est pas passé sur du virtuel. De toute façon, parce qu'il faut qu'on reste sur du présentiel pour les bourses de formation. Donc, on est resté sur les mêmes procédures. La seule chose, c'est qu'effectivement, on a des procédures supplémentaires qui sont venues s'ajouter après le Covidien. Enfin, après le cursus pendant Covid et après le Covid.  Mais c'est des procédures internes et des procédures qui visent plus des procédures médicales. Comme la maintenant, il faut qu'on demande aux gens s'ils sont vaccinés, ca passe par une procédure d'autorisation de voyage aussi qui monte à plus haut niveau. C'est tout pour les bourses de formation, pour les missions d'experts, on était en présentiel et on est passé à	Les formations ont continué à se faire mais avec des procédures supplémentaires liées au Covid19 Pour certains experts, la mission s'est organisée en virtuel.  Les autres externent à l'agence ont continué à voyager pour se former	Nouvelles procédures à respecter  Trouver les outils informatiques

	des missions d'expert en virtuel, donc missions d'experts en présentiel, c'est à dire qu'effectivement on recrute un expert, on l'envoie dans le pays pour effectuer son expertise quand on est passé en virtuel. Il a fallu. Trouver des experts qui puissent être en contact directement avec le pays et qui puissent être en contact, qui ait les outils informatiques pour faire du virtuel avec le pays et que le pays a aussi les outils informatiques pour le faire. C'est pour ça qu'il y a beaucoup de missions d'experts virtuels au départ. Où c'est nous à l'agence qui nous sommes occupés de toute la partie virtuelle et donc on a mis en relation l'expert à la maison. Et la contrepartie du pays, et ça, organisée par le virtuel de l'Agence parce que tout le monde n'a pas les outils informatiques comme nous, on utilise WebEx, par exemple. Ça demande une licence spéciale qui est quand même très chère et une personne privée comme un expert ne peut pas, ne peut pas se payer un logiciel comme WebEx, par exemple. Donc, ça, c'est bien la différence entre les bourses de formation qui sont restées en présentielle, mais auxquelles il a fallu rajouter des procédures administratives supplémentaires et les missions d'experts. Ou seulement une partie a pu se faire en virtuel. Maintenant, on recommence à nouveau à refaire du présentiel, tout ce qui n'a pas pu se faire en présence virtuelle va se faire en présentiel, donc présentiel c'est on envoie l'expert d'un pays pour faire son expertise.		
{07:44}	The tools of Virtual Communication Comme je le disais tout à l'heure, effectivement, on s'est beaucoup servi de WebEx parce que WebEx est un outil qui, effectivement, à partir du moment où c'est nous qui organisons le virtuel. Les autres partis n'ont pas besoin de soft spéciaux.	WebEx et Teams  Les agents externes peuvent	PAs Zoom pour des raisons de sécurités
{08:07}	donc ils peuvent se logger sur une plate la plate forme virtuelle de WebEx, de leur téléphone, d'un ordinateur portable, d'un ordinateur, comme une tour de de n'importe quel ordinateur. Sinon, on s'est servi de Teams aussi, mais Teams Plus en interne, c'est à dire que quand	se connecter à WebEx.	

	ont était en travail à domicile. On sorganisait des petites réunions entre collègues pour partager des informations, pour partager l'avancement de ce qu'on mettait en œuvre. Ça, c'était c'était plus avec Teams. Donc tout ce qui était en interne, on travaillait beaucoup avec Teams. Mais tout ce qui partait à l'extérieur de l'agence on passais sur la plateforme WebEx, donc c'est ces deux outils qu'on a utilisés. On utilise pas Zoom, par exemple à l'agence, car c'est un système qui n'est pas considéré comme sûr. Et donc, on ne peut pas utiliser Zoom pour du virtuel à l'agence. Ce sont les instructions de notre service informatique du département informatique.		
{10:05}	Remote working management Je dois dire que pour moi, c'était facile comme tout. Parce que je n'ai plus d'enfants à la maison. Ma fille est grande, donc elle est plus à la maison, elle habite à l'extérieur, donc j'ai plus d'enfants en bas âge. Je n'ai pas de mari non plus. Enfin, on est séparé avec mon mari, ce qui fait que je suis toute seule dans mon appartement. Donc, dans la mesure où je vis toute seule dans mon appartement, c'est hyper facile. Non seulement c'est facile, mais en plus c'est beau. C'est très efficace parce que moi, il n'y a personne qui vient toquer à ma porte pour poser une question ou quoi que ce soit, ce qui fait que moi, je pouvais travailler très concentrée. Parce que je n'avais personne qui venait me déranger dans la journée, alors que au bureau. Effectivement, il y a tout le temps des gens qui passent, qui pose une question, qui repartent, qui reviennent, qui repartent. Tiens, un autre. Il y a tout le temps du mouvement et pour se concentrer, c'est beaucoup plus difficile au bureau qu'à la maison. Je parle de mon expérience à moi. Effectivement, quand on a des enfants à la maison, c'est plus compliqué. Mais pour moi, c'était franchement très simple. C'était beaucoup plus efficace. Déjà, je travaillais beaucoup plus efficacement et oui, c'était simple l'organisation. J'évite du temps de transport, donc effectivement, j'étais en ligne à partir de 8 heures et demie le matin et en ligne	Plus de tranquillité à la maison  Flexibilité des heures  Plus intéressant et plus facile. Facile à se concentrer.	Bonne organisation et trs productif  Pas de perturbations

	jusqu'à 20 jusqu'à la fin de la journée. Je décrochais aux environs de 17 heures 17h30. Mais c'est beaucoup plus flexible. C'est vrai qu'on a une flexibilité à travailler, qu'on a pas au bureau, parce que c'est vrai que quand on a fait sa journée au bureau, quand on rentre le soir chez soi, on n'a pas envie d'ouvrir son ordinateur à 8h le soir, alors que quand on est au bureau, quand on est au travail à la maison et qu'on a travaillé par exemple de 8 heures à on va dire midi OK, qu'on a pris deux heures ou trois heures le midi parce que, comme moi, j'ai besoin d'aller courir le temps que je rentre, que je prenne ma douche et tout Donc je me remettais aux environs de deux heures et demie, trois heures sur le bureau, au bureau, ce qui fait que dans ce cas là, je pouvais travailler plus tard le soir. Donc, on a une flexibilité, on travaille à domicile, qu'on n'a pas dans le travail au bureau, tout simplement. Donc, j'avoue que pour moi, c'était non seulement plus flexible, c'était plus efficace.		
{12:53}	Encountered difficulties c'était plus simple. La seule chose qui manque dans ces cas-là, c'est la communication. Il y a moins de communication directe, alors même si on était même si on organisait, on avait régulièrement des meetings et on s'appelait les collègues. On s'était fait un groupe whatsapp. Donc sur WhatsApp, on se transmettait des informations et autre n'empêche que quand on est au bureau, on a plus de facilités pour aller récupérer l'information dont on a besoin tout de suite. On va voir la personne. Op! on a tout de suite l'information. Quand on est à domicile, ça, ça manque. Alors on avait Skype, on avait Teams, on avait les numéros de téléphone de tout le monde, mais bon, on hésite quoi. On ne va pas aller tout de suite prendre son téléphone pour téléphoner à la personne. Pour avoir une petite information, on se dit peut-être que je peux la récupérer moi-même. Donc on cherche, on cherche comment on peut récupérer l'information et là, on perd du temps, alors que si tu vas directement chez la personne qui a tout de suite l'information.	Perte de temps à chercher les informations alors qu'on pourrait les avoirs facilement en présentiels	Manque de communication direct

{14:38}	Work performance during Covid19 lockdown  Ah oui, c'est tout à fait possible. Si, on est autorisé? Non. Pour ce qu'on fait, c'est tout à fait possible et c'est tout à fait gérable. Je ne dis pas qu'on aurait pu le faire auparavant parce qu'on n'avait pas les outils informatiques pour ça. Si je reprends 10 ans en arrière, à 10 ans en arrière, on n'avait pas les outils informatiques pour pouvoir tout faire à la maison. Mais moi, maintenant, avec l'environnement informatique que l'on a à l'Agence, je pourrai travailler, on va dire à 80 % 90% à la maison. Après, ce qui manque, c'est le relationnel, c'est tout ça, ce n'est pas une question de travail. Après, c'est une question de relationnel. de contacts avec les collègues, de contact avec les personnes, ça, ça manque. Mais sinon, au niveau travail, je peux tout faire aussi bien de la maison que je ne le fais ici. Soit c'est kif kif.	Avec les outils disponibles en ce moment, il peut travailler à distance.	Oui parfaitement à condition que les outils soient mis à disposition.
{15:54}	Influence of covid on work bien sûr, qu'elle a influencé mon travail parce qu'elle a changé complètement ma façon de travailler.	Réapprentissage des outils techniques	Adaptation à la nouvelle méthode
{16:03}	et puis la façon dont on procède aussi a On a mis en place plein de meeting virtuel qu'on ne faisait pas auparavant. Donc, il a fallu s'adapter. Il a fallu savoir comment ça marche, tout ça. C'est à dire que nous, on nous a dit du jour au lendemain vous êtes chez vous. Et puis. Et puis voilà, on nous a dit , vous savez qui a WebEx? Ça existe depuis y a teams qui existe. Et puis voilà, débrouillez vous avec ça quoi. Donc, il a fallu s'adapter. Il a fallu former aussi. Je dois dire que dans notre groupe, on s'est tous formé les uns les autres en faisant, c'est à dire ont organisait des meetings entre nous pour voir comment les choses fonctionnaient à. Comment tu fais pour enregistrer et toi, comment tu fais pour faire ça? Bon, alors, on s'organise, j'essaie. J'essaie de mute d'enlever les micros à tout le monde. Je remets les micros, j'enlève les caméras, je remets les caméras. Comment? Comment le système fonctionnait? Le système en lui même. La plateforme, comme une plate forme virtuelle, fonctionne. Nous, on ne savait pas. On avait jamais fait ça auparavant et on s'est retrouvé tous, chacun chez soi, à		

	devoir apprendre à fonctionner avec. Donc, effectivement, ça a complètement changé. Ça a complètement changé notre façon de travailler, ça a complètement changé, notre façon aussi de communiquer les uns avec les autres. On communique beaucoup plus aussi. Effectivement, on a notre petite groupe WhatsApp sur nos mobiles en téléphone. On communique beaucoup par WhatsApp, donc tout ça a changé. Toute notre façon de travailler a changé.		
{18:12}	Language barrier Alors je dois dire que en interne, pas du tout, parce que de toute façon, on travaille ici, on travaille en anglais, on travaille ici, on travaille en anglais, on travaille aussi en français, on sait avec qui on communique en français et ceux avec qui on communique en anglais. Ça, là dessus, aucun, aucun problème de langue. Avec l'extérieur pas vraiment pouvoir dire on a essayé de trouver des solutions à chaque fois qu'on a organisé des meetings virtuelles, on est passé par une plate forme avec avec interprétariat, une plate forme interne informatique qui s'appelle interprefy, qui a différents canal audio et donc avec des interprètes en cabine comme des meeting normaux, quoi. Dans une salle de réunion avec des interprètes en cabine qui font l'interprétariat. C'est la première solution. On a fait quelques meeting comme ça. On continue d'en faire quelques uns qui réclament des meeting quand même, qui réclament vraiment de d'interprétariat. Après, à côté de ça, on a fait aussi des meetings virtuels où on avait. Un de nos Staff qui faisait qu'il faisait une sorte de résumé en langue française pour les pays francophones qu'on abordait un thème et à la fin du thème, ou de temps en temps, toutes les dix minutes, un quart d'heure il faisait un petit résumé en français pour les francophones, ca c'était une deuxième façon de faire et la troisième façon de faire. C'est ce qu'on a trouvé récemment avec PowerPoint ou le système PowerPoint fait de la traduction simultanée. Lorsqu'on ouvre une présentation et qu'on parle, on a une on écrit une traduction simultanée dans le bas de la présentation. Donc, on trouve des solutions quand on veut trouve, quand on veut, on peut. De toute façon, qant on ne peut pas, on ne peut	Interprefy Résumé pendant la réunion Utilisation de Powerpoint.	Toujours des solutions pour y remédier.

	pas. Oui, on s'est adapté et on a trouvé des solutions à chaque fois.		
{20:42}	misunderstandings/conflicts  Non, à aucun moment à aucun moment, je dois dire. A aucun moment, je me serai aperçu d'une situation de conflit. A aucun moment. autant autant présentielle. On peut trouver des situations de conflit parce que je pense que la communication simultanée qu'engendre le présentiel engendre aussi parfois une incompréhension lorsqu'on est en virtuel, on est obligé de penser à l'avance aux messages que l'on veut transmettre quand on parle. Ce qui implique qu'effectivement, on prend peut être plus le temps au niveau de la communication, on prend plus le temps pour réfléchir à la communication qu'on ne le fait en présentiel et donc qu'on s'évite toutes ces incompréhensions qui peuvent aboutir à un conflit. J'avoue que tout le temps qu'on a fonctionné, même chacun à la maison, mais à aucun moment, aucun moment, il y a eu une situation de conflit, au contraire. Au contraire, je trouve que ça a rapproché les gens énormément. Le fait d'être chacun chez soi et le fait d'être en télétravail, ça nous a, ça nous a beaucoup rapprochés. Tout tous ceux du groupe qui travaillaient sur la même chose ont était tout le temps en contact, tout le temps, J'avoue que ça nous a beaucoup rapprochés les uns les autres, à savoir comment chacun va, comment chacun se débrouille. Comment ça se passe chez toi? Ça va si t'as besoin d'aide. Dis moi si t'as pas le temps. Voilà, c'était beaucoup plus de communication qu'on ne trouve quand quand on est, qu'on ne trouve quand on est en présentiel.	Prends le temps de réfléchir avant de communiquer le message	Pas de conflit  La distance crée des liens

## Interview 4 conducted in English

### D, PMO

Speaker	time	Topic:	Memo	Research question
D	{02:45}	The way of working before and after Covid:  OK, yeah, very interesting. Well, before and after I did before, let's start with before we we used to manage	Virtual meetings where very few compare to covid time and now	

kind of the usual way, which is in line with our kind of guidelines, regulations. which means we had face to face events. These were national, regional, interregional, depending on the type of project. And as usual, we had the training courses, we had meetings, we had a long term fellowship trainings. short term fellowship trainings. We did procurement. So there were all kinds of activities which we usually would be providing through the program and also always face to face, which means that either expertise or technical officers or program management officers would travel to the venue, the different countries, or if this is a meeting or an event in Vienna, the headquarters that could that was also possible, that event that held here face to face. And actually, because we have so many activities, there were so many events almost every week, different events held. But as I say before that, it was face to face always like the only exception was when we had on few occasions only home based assignments which were given to experts to prepare to read through some material, to prepare something which was required prior to the mission. But as I said, this was on very few occasions. And on the related some specific topic, this was before. And actually what was before is that that due to these many meetings also at headquarters, we were able to meet quite regularly. I would say at least once a year, sometimes even more the NLOs or counterparts who are coming here for the general conference or for different events. So that kind of help maintain face to face contact. Even if we as PMOS were not travelling every year to their countries, then this is the picture before what happened after? I think immediately after there was a bit of silence maybe in the first one, two months because this was kind of unknown, unforeseen situation. So I think all national authorities were very busy and engaged to it with how to address immediately this issue. But of course, we've been planning and implementing mitigation measures, which means that we increased the much bigger expense, the virtue to the use of virtual tools, be it for just the project meetings or stakeholder

Time of silence at the beginning of lockdown

Difficult to have everyone engage and participate the virtual meeting

Planning takes more time.

Training in specific days

= quite nothing happened at the beginning that mean the project where stoped for a while to rethink how to make it.

	meetings like we used to do in the past face to face. We started to do virtually through the two platforms, which we mainly use, which is WebEx or MSteams. We also have Skype here, but at least from my perspective, I do not use it much or almost at all. Externally, I have used it only with some colleagues internally. And then we started implementing virtual expert missions, virtual meetings, virtual events. I think one big and noticeable difference was that while for face to face meetings, it was kind of, how should I say, maybe not easier. But it is possible to keep the participants, let's say, for five working days, four working days, of course, we break morning afternoon lunch in a meeting and keep them engaged. We noticed that this format was no longer possible for virtual events because simply when they sit in their office somewhere far away or in their home, even when there was the lot of them, it was difficult to have them engaged with the computer screen for eight hours and actively participating. This is the reason why from trial, from the very beginning, we learned that ideally the planning should be done for half a day sessions for three hour sessions for us, of course, coordinating with the recipients of these three things. And also on some occasions I noticed that they preferred to have the trainings on specific days. For example, every second day, for example, Monday, Wednesday, Friday and so on, which would allow them time to focus on their daily activities in their laboratories, in their institutes during the other day so they don't fall back. What we also did was really to reassess the procurement needs of the countries and advance procurement, which was possible to advance this, we have		
	done on several occasions.  The tools of Virtual Communication	the softwares are	WexEx and M
{08:16}	OK, I touched upon a bit on this question. Here at the agency, because all the software is centrally provided, which means is a PMO, on the official computer, I don't have the IT option of downloading any program randomly, which I may like because of security issues and so on. So the approved	centrally provided for security reasons  WebEx, Teams Skype but not used	Teams

		tools for communications are WebEx platform. We use MSTeams and we have Skype. As I mentioned, I use mostly WebEx for my meetings and we've used in really big meetings. In one, for example, I had maybe 70 people or so. The platform is really stable, but actually I never faced any issues with this platform. It's working right mistakes. I also use maybe a bit less, but still it's a very good platform. So no, no issues or no challenges faced. Also, Skype. I've been using mostly the with colleagues, you know, for a call or a chat we may need to do for one of my training cpurses. I use the platform which was developed by another department of the agency, which which is called CPO for Net. This is an advanced platform, which is interactive game content training material and have, you know, comments and exchange online and offline, of course, has the recording function. So it was a very well, suited platform for our purposes. And I think colleagues are also using it for some of their training event. The challenge I faced was that many organizations externally also, including our counterparts, use Zoom and we don't have official license here to use. So actually, initially, whenever I was invited to join other meetings organized by other parties, I had some challenges of joining Zoom. But I think eventually that was possible not through the(), but through the () platform, or if for some reason sometimes he didn't work. I was able to connect from my phone. But as I said, this is only when I was invited to some meetings. We do not organize by default meetings through Zoom from our side. This is mostly all about the virtual communication tools and of course, as always, continue exchanging emails. WhatsApp we've used the lot like maybe even more than before. That was a big dool to use with counterparts NLOs and so on. So whese are kind of the different tools with counterparts are kind of the different tools.		
		these are kind of the different tools which I've been using in my daily work.  Remote working management/ The project could have been managed remotely all along	The thematic areas  Remote working	D mention the thematic areas that depend on
{1	1:33}		cost less	the possibility of

	And well, not an easy question, because, you see, I think to a big extent, first of all here, our work covers a lot of different thematic areas. Some of them are more, let's say, educational or academic, where knowledge can be imparted online. But others are really practical, like how to use certain equipment or to install certain equipment. Or, for example, in human health, there is big equipment and there are clinical clinical work. So our training course is focused on clinical work. So. Another aspect is really it's a bit of, how should I say, the custom or habit of most people that we are used to do business face to face. So I think it was also a kind of switch of mentality for the people we work with. For some of them, it was easier to switch to virtual tools. For others, it was not in some countries or some institutes which are remote. They also had issues with the Internet. So I wouldn't say, you know, from my perspective, in my experience, I think it's a great opportunity. It's an amazing opportunity to have the virtual tools because we can involve many other stakeholders as compared to the face to face meeting where in which the travel cost was high and so on. But on the other side, not every single opportunity could be done virtually because there's so much depends on the objective of the activity and the scope of this activity. So from my perspective, I think the the ideal scenario is when we could have a blended approach, which means when you consider that events can be done virtually, we do them virtually because we are saving on costs. We are increasing the efficiency. We are adding more participants. But when events need to be done face to face, when this involves clinical work or very specific work to be shown or specific exchange, I think this also needs to remain face to face. So I would say 50 percent. And your answer. Yes, and 50 percent now. And I would recommend the blended approach to this virtue and Face-To-Face.	Objective and scope of the activity  Blended approach	working remotely. Some projects related to a specific area cannot be managed remotely.  Both are required: face to face
{14:17}	Work performance during Covid19 lockdown	Be very very specific in the communication	Communication issues.

Oh, OK, well, again, what I say is only from my perspective, so you may see very different answers depending on colleagues. I think all of us, for some time or for a longer time, had to move and work from home. We had to be. how should I say, before we had the face to face meetings, even internally with technical officers every now and then with counterparts after that, this was not possible. Most people are all where working from home. So it was also really not possible to pick up the phone and call somebody in the office. We had to use all the virtual tools. So I think what was very important was really to be very, very specific in the communications we are sending and exchanging to avoid any kind of confusion misunderstanding, or because when you aim to reward, ask questions and so on. So I think I am particularly detailed about how I send the communications and also being considerate that this situation was new to everybody. It was difficult. Many people were at home with their family. They had to take care during working hours sometimes. So really it was to show a lot of flexibility. But in terms of my specific performance, actually, I should say maybe I like innovation. So for me, I found it very good. I found myself more efficient. And I tell there why. Because it was timesaving, not have to do all the things in the morning, which I have to do. I used to start work earlier than usual while at home base. I need to I don't feel the need to take breaks, mainly because everything at my home was nearby. The food, the coffee, just like a few metres away literally. And that is that here in the office. It's a very big building. So I have a lot of what I would call time wasters. You need to work here. You need to also, of course, when you're at home, nobody pops up there. No unplanned meetings is that everything was planned. And I found myself very efficient and very focused. And I also found myself that because of certain periods of time of uninterrupted work, I was able to work on more conceptual issues, which not always in the office. You have the opportunity to focus for two hours uninterrupted on some topic design, CPS or anything, which you need to. So I what is that for me, this

Very efficient Mana Time saving the fa

Start earlier

Maybe not valid for everyone

Meet others and see them in real

Management with the families

Efficiency growth

Worked more

Insistence on the efficiency of the work

work, this higher efficiency. As I say, I do not know if this is valid for everybody or not. I also found it a bit more healthy lifestyle, you know, but this is this is my own perspective. And as I say, during this period, I also used to come two days to the office just by choice and three days working from home. And I found this an excellent model of work by being able to meet colleagues, other senior supervisors whenever necessary, face to face and being able to have more continuous periods of focus, uninterrupted work at home. Both for me, I've been very efficient. Thank you. Language barrier No barrier because OK, this question. I think it could be a of the language but {18:15} general thing independently if it's face because of the to face or virtual. In my case, frankly, I internet have not had the language issue or communication cultural issue or any kind of issue in the communications, be it face to face or Issue of language virtual. So I would say no. The comprehension language has not been a barrier in the be can solved field of virtual communication. while working However, the use of those and the remotely. Some availability of Internet has been at tools can give certain points a barrier in the in the simultaneous virtual communication. And so this was translation. something, for example, we plan on meeting. We have families is the time for somebody to speak. And it happens that this is somebody disconnected. He or she cannot connect or he or she cannot project their slides. sometimes there is a question and there is silence on the other side because the person didn't hear. So I think for for virtual meetings, we need to plan for such a first such kind of unforeseen events and things and also intercultural I. I wouldn't focus on this aspect for virtual rather. It's maybe on the knowledge of technology. And because I noticed some people are more keen on using computers and new technology, and for them it was really easy to connect and do all the work online, while others are more used to working on the face to face. So it was more difficult to have them engaged in virtual discussions. But I should say that from my perspective, actually virtual events to the event we have organized have been working so far well and there has been no specific issue with language in in the group

meetings, which contain people from several countries that have languages. When needed, we have been also translating. But maybe also you have noticed that recently there is this option of the various platforms to have the subtitles in another language or in the same. So if somebody speaks in English, there are subtitles in English, it's automatic program. So an sometimes they may be small mistakes, but mostly is correct. Or even in the recent meeting, I saw that there was a possibility for subtitles, which means if somebody spoke in English, subtitles could be in French, which is an amazing thing. And actually it is resolving to expand the issue of language. Thank you More flexibility. D Planification **Advantages of Remote working** notifies here that they work remotely {21:13} Yes, OK, so quite a few advantages No disruption even before the from my perspective. As they say, I'm pendemic kind of a person who is innovative and You can plan your whatsapp, e-mails, like to have more flexibility and new break time as you phones, because approaches. You may not hear the wish they don't meet same from everybody you interview. every single day But first, let's let's say we work with She was not with counterparts. African member states. In any case, taking breaks and Thev meet this has mostly been remote, working then she works personal on few by email, by phone, by WhatsApp even more occasion when before the pandemic, because we they travelled didn't meet every single day with counterparts. There were just few occasions when we traveled during the Most of the event year or when they traveled. So it has where planned been remote alwavs in perspective. But it was not remote No time wasted before I was that we as agency personnel, we were in the office and you could go knock on neighbor's door or organize an in-person meeting with colleagues and so on. So this is the part which has changed. But actually in terms of advantages, as I said, I found myself more efficient because I had less periods of interruptions. Most of the virtual events, even 90 percent and more, they were planned. It was not that often that somebody would just pop in. Usually colleagues would ask, when are you available for a call to discuss this or that topic so you could always plan. So my time was more planned, more scheduled, and I could devote dedicated longer time to to work I wish to focus on because when we are constantly interrupted, it

		was it was more difficult. Then I found it. I didn't have the time waste stuff. You need to go to the cafeteria and walk ten minutes to get your lunch and eat there and return for me. I found it practical. I was sitting at home on my living room table behind was my kitchen. So frankly, I was not taking breaks. I found it. I found it like a very optimal way for me to work. I don't know if that could work, but for me that was good. I found that I was able to start earlier and I was able to finish earlier. And on some occasions I was able to do more work and if I would stay in the office. But as I say for me, the blended version of being some days in the office and being some day based, the tone would be the best option from my experience. Thank you. Thank you.		
{24	4:03}	Actually, during the lockdown, I noticed, because this was an exceptional situation to everybody, so I think colleagues in the House and also our counterparts think they were in a way very understanding, which means that when something was unclear for some reason, whatever it may be from any side, it didn't lead to conflict or anything like this. It never led to further exchange to clarify. So as I mentioned, knowing this and being aware of this, I was always careful to be very specific, very explicit, to provide the relevant information so that we facilitate people to to look for, you know, what they need to do. For example, I don't see an email to follow up on something going forward. I always review in my email form. This is the background of the situation. This is what is recommended. Could you please follow up on this, for example, and really made sure that all elements are in place to avoid misunderstanding, to avoid confusion, to avoid any kind of issue like this? And there haven't been any conflicts. Actually, as I said, I noticed the colleagues that are much more understanding and we've been adapting to this new ways and working very well and with some colleagues extremely well. So I think it's fair is the new way, because so many private	Trying to provide as much as possible relevant information  No conflicts	No conflict  Effective communication

	sector companies have moved before the pandemic. So the world is changing and we need to learn to work with these new tools and new ways. And personally, I'm supportive of these changes. Thank you.		
{26:26}	Yes. And actually to the bigger expanse, my answer is yes. And that is earlier mentioned only for some cases. It was not possible because some events really need to be face to face. I have, for example, a regional project in human health, which is a big project with lots of planned activities, lots of group activities and regional training courses. So even though we planned to organize these, unfortunately this was not possible because it involves people travelling from 10, 15, 20 countries to another country. So so this required a lot of this had lots of challenges because many countries were in lockdown. Or if one country is not the other country may be so. So in such cases, we have not yet been able to implement the clinical part of the activities. But still, we are not sitting in the waiting for the situation to change. We had project team discussions and we decided to adopt the working plan whenever possible. And at the sessions, for example, have part of the session virtually when this refers to theory and do the clinical part as soon as borders are open, as soon as these regional events are open in my portfolio, I also have a lot of long term fellowship trainings and I should say that the majority of them have worked very well. They were placed without any delay. And I think this is because that it seems that member states are much more willing to take long term failures, even if there is some initial isolation to stay calm for 10 days or two weeks. The fellows could do and then start their training programs, which are for six months, one year, two years or more. So frankly, in terms of performance and landside, we have managed to achieve more by having more meetings which bring additional achievements to the program, by bringing more stakeholders, by being involved in more virtual events, because this gives us more exposure.	80% to 90% of the objectives have been achieved.  definitely yes if face to face events were not place.  Trainings worked very well.	Everything achieved except the event that requires travelling

And on the other hand, some activities are lagging behind because of these clinical aspects or aspects which really must be done face to face. So we continue following up, but I would say may be difficult, but maybe 80 to 90 percent of the objectives have been achieved. And also, as I say, we we have had new contributions which were not planned before the pandemic. But thanks to the virtual tools this was possible.	
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Interview 5 conducted in English

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Speaker	time	Topic:	Memo	Research question
E	{00:41}	The way of working before and after Covid:  OK, naturally, most of our activities before the covid was mostly face to face. Ah, we we came up with the idea of this virtual platform in order to at least combat the effect of the pandemic, you know, the negative effect of the pandemic, thus restriction in travelling, you know, because the activities, some activities could go on while we are on long term. So we. We have to adapt quickly and then started applying that initially, it was a big challenge because network Internet connectivity in the member state wasn't too good in some countries. And not only that, most of the most of the colleagues in the member states, most of the kind of some of the counterparts, we are not I.T. savvy. So they they are not used to the virtual platform. Even some of us here also we all have to learn, you know, in order to get used to it. So it's a case of a pandemic and brought us here to the use of the federal platform.	Mostly face to face activities  Adapt quickly to the situation. The internet connexion was not good in the member states.	Part of the activities were online but mostly face to face
	{02:36}	The tools of Virtual Communication  Oh, I think, you know, within the agency here, most of the things we use, especially online communications had to do with also we have to look at the security implications and how secure those platforms are. So the first one that was licence for us to use here was the WebEx, the Cisco WebEx, which is very much in use today. We are still using and then after that, the Microsoft teams also was launched, you know, and these two, yeah, they 're lot of similarities. They have a lot of things in common, you	The tools have been performed	WebEX Teams

	know, but at the end of it all, they cannot replace face to face interaction, you know, but then they're sophisticated in moving the program forward within this pandemic situation. And they're really, really helped.		
{04:01}	Not the remote also is something already being practiced in the Agency you know. When we have to walk at home, but then with the pandemic and everybody has to go home, it was a availability of the equipment of the equipment and the nature of our laptops, you know, and then give us access to use the virtual private networks will be, you know, providing they they assess key in order to effectively use them. Because like I told you, also, one of the key things we look at here, we've been working virtually also is the security of the information we share. So the agency always does this jealously somehow, you know, because of the nature of our work. Yeah. Initially it was a big challenge because working at home virtually in a family setup, the distractions will always be there. You know, but then as time goes on, everybody's getting to grips with it and then start adjusting. Initially it was awkward, a shock, but then with all the equipment, all the assistance colleagues provided to those in the 80s, the organization was able to make available the laptops, you know, to the majority of the people. So. That made life a bit easier and walking a bit easier.	Mention here that the agency use to work remotely  Difficult to manage in a family set up  Awkward situation  Lost of internet connectivity  Uses sometime personal cell phone to continue if there is no tinternet	Difficult to work at the beginning  Lost of internet connectivity both side  Need to use personal belongings for the professional purpose.
{06:31}	The project could have been managed remotely all along  to some extent, you know, I must confess, there are sometimes the virtual platform cannot cannot replace email with us, but we shall have to have to be face to face. You know, there are some protocols that have to be done in the field, and then it has to be face to face these days. You can just do virtually if not that the platforms also the of the limitations in even when we do have interpretations in case of a regional project or projects up. We have people from different countries with different languages. Our present interpretations we have to come in, you know. But that apart also were going virtual is very difficult also for you to	Virtual platforms cannot do everything.  Concentration level or participation level.  Less costly	No. Because presence is sometime necessary.  Concentration

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	determine the conscentration level or the participation level of each of the participants you know so so. Like I said before, the virtual platform that we have, they are happen now that we help in the near future because there are some activities that we can also continuously do virtualy, which we have been cutting down costs like travel costs, you know, and the risk associated with it. They're simply put, there are also a lot of activities which the virtual platform cannot cannot replace. But that whole face to face and I think this will proceed that way in the near future.		
{08:37}	Encountered difficulties OK, the difficulties associated with this is mostly Internet connectivity. You know especially from the member states here thinks are a bit reglemented. Internet connectivity is always up and running, even though once in a () and one of my webinars I experience an Internet network switch off here, you know, and we have to to use private phones to power and to power participation until it was restored after a couple of hours you know. So this is what happened in a place like this where we almost have control of most of the things happening around us, and then we are a bit technologically advanced. And then when you compare this with the member states, you know, this is always happening over and over again. Lots of Internet connectivity, power finial and then also trying to get the people up to speed on how to operate this virtual platforms. Initially, at the beginning what we normally do is that we will take up a day, you know, do a kind of a kind of a dry run, a test session where we get all these participants spent time with them, tell them how to connect and then what to do and what not to do. You know, because also what a your platform to watch. You know, there are rules. You know, there are procedures. You know, we we have to behave because if you don't, you we add inconvenience that the same platform we do or you kick them out, do not be able to perform, participate fully. So these are some of the challenges we had then another thing also, cost of Internet in the region, you know, within some countries, we had to specially request from the management here to start paying them a kind of	Internet connectivity	Challenge: take time to make people connect  They pay subvention to some countries so that they can get a better connectivity

{11:36}	subvention in order for them to, you know, to pay for their Internet and join in some of these virtual meetings. So those are the challenges.  Language barrier Yes. Exactly the language has always been the language has always been a challenge, a barrier, because WebEx, Cisco, WebEx, do not offer translation now does not offer translation opportunities neither the Microsoft teams, you know, so the only platform that offers that is interpretfy, unfortunately, the agency doesn't have a license for that, I think it's another sister organization you know that have the license for that. So, the occasions we have to employ interpretational service, we we always go through the MTCD get these interpetrify in order to use it for meetings, you know, but if not that, you know, the the fear cost of this interprefy profile makes it a bit difficult such that we cannot afford interpretational service for the duration of the meeting. We have to choose a number of hours, you kow we have that will be available. And also what we do at times, we will also use some of our colleagues, you know, who who have the flair for languages, who can speak on one or two more languages, you know, to standing at times. But definitely is. It's a big challenge within the within the virtual platform, you know, the different languages. And coming from a region like Africa in which is split into the Anglophone and Francophone, this will always come to be, you know, so that's the way it is.	WebEx doesn't offer translation opportunities.  Working with Francophones in Africa is difficult to find a translation service.	The language barrier remains the same as for physical work.  working mostly with francophone
	Advantages of Remote working	Family set up	No advantage.
{14:08}	I will really need to think twice about that to to actually believe that there is an advantage now. The way I look at it, you know, it might be a case of personal preference, you know I might be one of those contacts, you know, when I'm will be when I'm at home, when I'm in a family setup, you know, I'm in a family setup. It's not time for a work. And then when I'm in the office, even though all my senses, everything is geared, you know, for, you know, so remote walking. Yeah, in the context of the pandemic, that was about the only option we have got and then it really it really up to to keep the program, you know, moving, you know, to keep	No time for work in a familly set up.  No other possibility. No major advantage	Forced to work at home. Psychologically, home is not a place to work.

	communication between colleagues and counterparts and the other stakeholders in order to make sure that the walk was more in the know. But generally in a normal situation, if you. I don't see any advantage that. You know, I don't see any I don't see any major advantage.		
{15:50}	misunderstandings/conflicts Yes, definitely. You know, we thought these issues have been trying to highlight you know which basically falls on communication wether it is language wether it is IT. trying to log on into the virtual platform, you know, it creates a lot of role for conflict, you know, it creates a lot of role for conflict, you know, it creates a lot of room for disagreement at times. Some countries will tell you this is not applicable to their place. You know, they want to let you know that a fourth order problem is coming from here, but they can't connect. Well, it is obvious that it has to do with their capabilities and capacity there in the member states. You know, so there is always conflict. But the issue now is, you know, for us also to determine that this is a new platform, you know, this is a new reality, you know, for us to have the patience, you know, to relax and then find a solution, knowing that nobody's used to this, even though so there was always conflict, you know, but we are always prepared also to provide solutions to that. And this conflict, like it will do, stems more from communication and on the language of the IT connectivity. So does the way it is.	Disagreement due to the language  Adaptation to the IT	Communication Language and IT
{17:52} {19:21}	here for me as a person, I can easily tell you that you know last year we did a lot, you know, because one other thing also that the virtual platform made available made possible for us is that we are able to in most of our in most of our virtual events like webinars, we are able to reach a higher number of people, you know, interact with more people, you know, so engage with a lot of people because now they don't need to travel. We don't need to bring everybody here to Vienna, you know, so. Is that everybody is connected virtually, so that made it possible for a lot of people to key in into most of the webinars, most of the progress we are doing virtually.	Able to reach a higher number of people, interaction with a lot of people	Communicate with as much as possible  They manage to do as much as they can.

We did a lot even in the face of the pandemic.		
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# Interview 6 conducted in English F, PMO

F, PMO			T	
Speaker	time	Topic:	Memo	Research question
F	{02:19}	The way of working before and after Covid:  The management itself, before covid management itself was in fact, it didn't change that much, but the management and we're speaking with management, , this is done partly face to face and mainly with the actors within the the the, secretariat and partly in the distance, mainly with the national or regional actors. So better management. So everything that is dealing with the preparation, planning, monitoring, evaluation, this was anyway mainly done in the distance that, , especially with the region and the the countries, because we are not we don't have a presence in the region. So we are in Vienna. All actors are mainly based in, uh in Africa, in the region of the of Africa. So management was it was already mainly done in the distance. Now, if we if you want to speak about implementation that there was a there is a lot of difference before and a after covid before we tended to work mainly Face-To-Face. We are a technical agency, so we are providing expert support, transfer of knowledge, technical knowledge, though, this was mainly done through meetings, training courses, individual training group trainings, Face-To-Face, mainly Face-To-Face, because it's mainly hands on experience, the knowledge and expertise. Of course, as soon as covid began, we were faced with the international restrictions of travel. Basically prevented any form of uh face Face-To-Face training until recently, and so we had indeed to adapt in order to be able to continue some some forms of a of training, of transfer of knowledge and also just to keep contact with our counterparts. We had to adapt more and more to go for a virtual transfer	Management was mainly done in the distance.  There is no big difference before and after covid.  Easier and more efficient to have virtual than face to face.	Face to face and virtual but most of the work where face to face before.

The tools of Virtual Communication  OK, the the main one, I would say, would be the e-mail. This is my to my preferred tool, but I use also a lot Whatsap Especially for the communication with the with Africa on the part with NLOs a lot. And then WhatsApp, both messages and in video video connections it is a it is very important for me at least to try to keep that visual contact with the counterparts and the NLOs. It allows	Whatsapp, (faster communication)WebEx Teams are the most used.
of knowledge. And so this is how we we started to have meetings, virtual meetings. This is not a big, big difference. It's still quite ok because it's mainly done based on discussions of transfer of information from people to people not especially hands on. But it is quite OK, except that, of course, we are also facing some technical issues and actions, mainly with the stability of the connection and availability of the connections and the in the machines, also the computers, cameras and so on. Good sound connections, which is not always easy, but we had virtually to stop for a while, at least everything that was hands on. And then we start also having some remote expert missions. But again, everything that is based on exchange of information that you can do orally this, whether it is face to face or in the distance, doesn't change too too much. The technical challenge, if we if we if we succeed, getting rid of the technical challenges, but of course, it's always I think it's always easier and more efficient sometimes as well to have a face to face meetings than a virtual one. It's more complicated to be able to to assess, evaluate the body language, for instance. But also from the technical point of view, you cannot refer to to something we to say on the machine itself. You can you can, of course, transfer the information. But it's complicated to have some reference to to a machine, to or to a technique. It could be it could be a bit longer to change the full information.	

also having faster communication, when it's by by video to have to have group communication as well. And then four or little more the implementation of the activities we regarding we have implementation of the program and projects. We are using a lot teams uh and uh WebEx is I would say the main tools for implementing fo expert missions, meetings, some training course as well, at least uh when it's dealing with the theoretical aspect of the training course, webex and teams are most often used. Remote working management Time to adapt was needed {09:06} OK, but we had we underwent two quite long lockdown period and we Organize had to work remotely from home, uh, easily regular mainly. And, we used all the tools we meeting had at our disposal. So email, phone. WhatsApp, Messenger Much more video, web, WebEx teams. So all visual contact this was used. Um. We needed we with the had yeah we needed a bit of time for counterpart vie adaptation, of course, we used to to whatsap video be able to at least from the people, call this was the staff in the headquarters, we not the same could meet quite easily. Of course, before. people from the section, people from the division, people from the the department, but also people from other departments, for instance, the technical officers. We used to have very easy connection communication because we could meet the people quite easily for this. It it allowed, it it needed to have a bit of adaptation to get you more used to the remote tools. But we organised a very fast regular meetings, virtual meetings among the people of this section, people of the divisions and and everybody in the House afterwards for the for the communication with the continent, the African region, it was less an issue because we are used to deal mainly remotely so for the the day to communication. So we continued using the the same tools that we used to phone SMS emails. But I think that changed for me at least, is that I started using much more regularly the video communication this because it's a it's also a way to feel to feel closer in the

	i r c r v	distance. And so this change in this mage we kept. Now I have regularly, for instance, some counterparts and NLOs calling menot on WhatsApp phone, but on WhatsApp video. And I have much more frequent visual contact with with my counterparts.		
{11	1:53}  1:53}  1:53}	The project could have been managed remotely all along  Yes and no, for sure we didn't stop working, so. OK, we learned, I think that you will learn that we I learned and that part of it can be done remotely much more than I thought. Yes, so this for shure, there is part of t that can get done remotely. The thing is that the distance doesn't have the face to face dimension and for me the face to face dimension is very important, eyes contact, reading the body language and the capacity of interacting fast, with different people at the same time, oring also a dimension that is worth. So for the face to face interaction and frankly, myself, at least as soon as we could, go back to the office I went back uh to and I know that we with some people, it's much more, it's faster, more efficient way to interact directly. A short meeting face to face in ten, 15 minutes can for me, I think bring more information than, insight, especially because I think that lets say that the direct interaction with the possibility to see the person to see that the the person, the person is for me, it's also very important. It brings another dimension in the discussions, in the interactions, and I think it's more efficient. But for sure, now they are the situation in which I'm no longer, as I was doing before, I am no longer ooking for especially direct interaction. The remote part, as always, advantages. I think to have a mix of both would bring the best of both both approaches. I don't think my work and didn't fully remotely, not at with the same efficiency. And this is something that what I know, I yeah, I know for a long time, as I was telling you, we used to work with the	Not really  Some part of the work could be done remotely, but the face to face dimension is very important.	Direct contact is very important  And because remote work has its advantages alos, he suggested both methods.
		African region remotely. And so		

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	there is a lot of change with Covid. But before we from time to time, at least once, twice maximum a year, I was traveling uh in the country's. That I'm responsible of from a technical point of view, and there is even a short term interaction face to face with the capacity also to interact on a on short notice and in an unplanned manner, to adapt to the to the to the circumstances was extremely efficient. And the work that you can you can do in a few days, face to face with the with the people you're not used to to see is very very important. So at least from time to time, I think that the direct contacts are very important, very important.		
	Encountered difficulties	The	
{16:04}	By difficulties, the I would say the main the main difficulties to have is to be able to interact fastly. You cannot interact as far as when you have everybody in the same area in which when you have to go very fast, it happens sometimes you have to go fast. This is this is more complicated. And, of course, to to bring the people around a common connection, for instance. Otherwise no, from the whole point of view, I would say it was not difficult. The thing is that also this isn't about the work, it's about the challenges that were coming from the transliterations. People could not go out. People had to take care of the kids. This was a bit complicated for everybody. So it's it was more complicated to find the way a common time I would say when you could interract with a the people and because of the way many other things to be taken care of at the same time. It's not really about the work. It's about the the non differentiation between the t person personal and the professional life. Seems the same was true in the in the countries, which is probably more difficult because often the counterparts that have access to the telecommunication tools within the professional environment. Less at home and the lockdown where generalized everybody had a long lockdown at one time or another,	interactions were not fast.  Lots of difficulties mentioned  Some colleagues got the internet at home especially because of the lockdown	Complication for people who have families.  Mix of personal and professional life.  Internet connectivity were lost many time

almost everybody, and this was sometimes more complicated. We lost contact with some of our counterparts and NLOs for several weeks or months, even in some in some cases because they had no for instance Internet connections at home and not access to the images. This Arrives this arrives as well in the people where friends in lockdown in the in the family in the village. It's very complicated to have an Internet connection sometimes, but this was not the issue for the. For outsiders in the in the IAEA secretariat, it was less less a problem at the beginning. We had we had some people without Internet connection at home, but. This is the advantage you if that is that you you can go and buy one quite easily. And so we had several colleagues, including in my section, for instance, who had to get Internet connection at home to be able to work remotely, and did it. So this also this also shows the dedication of the of the staff. And I would say that very soon we had connections with everybody in the in the section in the division. The main difficulty was always related to having the people available so not dealing with emergencies some other important situation at home, taking care of the kids, taking care of the parents, taking care of grandparents, for instance, we have many people who were in charge of in charge of families, their parents or grandparents take their kids to. This was that small very organization. lt's not a real difficulties. It's organization. And so that's also why we we start organizing regular meetings, they were planed, so everybody was available at one time or two times during the week. Everybody at the same time, same place, same connection, using using teams where we could uh discuss about whatever situation avout either the workplace or even some personal and we could issues sometimes share especially share the information about what was done, what had to be done, emergencies the priorities and this came from the first lockdown period,

	and we are still keeping it now. So even out of the lockdown, we still have, we have kept at the section level, we still have our weekly virtual meeting because it's still virtual So even if the people are in the office, we have it virtually. And so every Friday when 30, everybody is on board on this meeting.		
{24:47}	Language barrier Uh. Yes and no. OK, I'm working with uh with Africa, so we have about half of the region that is French speaking the other one that is English speaking, there is a bit of uh uh Portuguese speaking countries as well. So the the language barrier is always not an issue, but it's a it's a it's a parameter we have to take into account always. Uhm, they are much the're more. A available expert in all fields speaking English and French, we have in my section we have a lot of the French speaking African countries so we are always dealing with the the the language. But in general, we we try and we often we succeed having communication with the language of the country we are working with. Uhm. So, no, it was not more an issue that than than before the virtual or face to face. We are facing the same, let's say, considerations. We are used to to that. Uhm, the thing I would say now, maybe it could be that the the the virtual part could maybe be a bit more, uh Easy for for from the language point of view, because there are things that we could not do before. If you are sending an expert in the field, if the expert is English, taking the communication will depend on the situation in the field. Or if you have people able to translate for those local people who do not understand, it will be OK. If you have nobody able to translate, you will be in some complicated situation in what we we had done it. It happened that we had a. Virtual expert missions or virtual meetings with English speaking people, experts dealing with the French speaking counterparts. If there is someone in the distance who speaks, who understands English and speak French, we can we can	Language diversities in the organization  No more an issue than before.  Translation if there is somebody to do it.  If there is somebody, it is easier to make somebody participate to it.  Also some software like powerpoint offer simultaneous translation	Always a solution found if there is any issue with the langage.

ensure the translation. This is the advantage of the of the the the virtual part is that you can have someone taking place, taking uh taking part in the in the event without having to be to be there. So this happens. We had that this is maybe even easier than from that point of view. I know, for instance, I participated in meetings that I was not especially supposed to, but as. French speaker, so I could translate, instance, the interactions between our director or DDG with some ambassadors or ministers and French people from French speaking countries, so this would have been complicated if it was in person, because I would not have traveled with the idea with the director, for instance.

I have to continue with that, because they are also in the larger. You know, but in the meetings we have with more with many people, I mean, many attendees, then the language can be an issue because then you can no longer it's complicated, let's say, to to ensure the translation or it cost a lot. OK, we had that recently. In the induction meeting of our NLO, the new NLOs and NLAs, we could not ensure a translation, we had the same also in the last meeting, we could not ensure translation mainly because it, was, technically it's an issue. It's complicated. Uh, and to solve it, technically, it cost a lot so that the cost of doing that is this is is an issue in itself and. We had we tried that as a maybe one year ago to have one of the staff or staff intervening, translating after each speaker had spoken, but it's complicated because it takes time. So it increased a lot the duration of the of the meetings, which is also an issue because the connection is not always easy, but to keep a connection for a long time. It's complicated, very complicated, especially in some of our countries in Africa. Uhm, so connection is not always an issue that especially you should be to keep it. Good connection. aood quality connections for a long time. It's more complicated. Uhm, and so there

{28:15}

{3	31:41}	there could be issue with the language. And now more recently, what you saw during the induction meeting, on the webEx meeting, if I remember well, we have WebEx or Teams, I don't remember. You have the possibility in during at least the the presentation, if your base if you are basing your your speech on a PPT PowerPoint presentation, you can, uh, you can have an automatic translation, only one language. But for Africa, it's enough in general, it's, you know, because it's either translation in French or in English.		
		Uhm, and this is a it's a very good a very good technical support, uh, we found a few months ago. Uhm, but it's not perfect, but it's, it's, uh, it helped it helped a lot. So. Yeah. Okay. So from the small audience, I would say language issue is language is not really an issue for the bigger audience, uh, especially if you go in the high level in the countries and and you have people not speaking English or French. Uh, so it could be complicated.		
		I say that If we have a small, small number of participants in a meeting in the distance, I think that the language issue is not an issue. It's not an issue because you can quite easily translate what's happening. You can you can take on board someone else that could that could ensure the translation. But if you have a bigger audience, that audience. Especially in a more formal way, language could be an issue because it's more complicated, technically complicated to ensure the translation. that'it. Or then you have to to to to uh use a lot of financial resources to ensure translation. It's possible, but it's very expensive.		
		misunderstandings/conflicts	People tried to understand	No confrontation to conflicts.
{3	33:43}	I think the people were very understanding and I think quite flexible also	each other.  Difficult to understand	Difficult to get the right information by writing online.
{5	34:08}	misunderstanding. This could be this could be because I don't I don't have uh a real examples that are coming to my mind like this. But, uh, uh, I can	people because there is no body language	Adaptation to the situation.

imagine that we had maybe to get to to to clarify some some, uh, some situation because, OK, when you are dealing with only the sound, not the face to face, not the body language and so on, it's sometimes a bit more complicated if you are dealing with the initial communicating. Also only in writing. Sometimes it's more complicated to do to have the information, exact information going through. So I could, uh, I could believe. Yes, that the the we had some we had we had to also adapt sometimes, but I don't think it's. That that different with what we are used to, because communication by email is it anyway, is something that we we are doing often in in any situation. If you are if you are able to meet one of your colleagues in the corridors and then to clarify sometimes something, it's easier you can do sometimes, you know, a few words, what you what you need a certain number of e-mails to to to communicate. I don't I don't remember that it was a major issue at all. And also we adapted and as I told you earlier, we we started organizing. virtual face to face meeting, so in this class, it allows clarifying when the people are able to do to talk in real time and interact, ask questions, requested clarification. It's a it's very useful. And this is what we did.

Easier to meet a colleague in the corridor and clarify directly than if you have to write something.

G

Speaker	time	Topic:	Memo	Research question
G	{00:55}	The way of working before and after Covid:  Well, I guess, or at least I will uh shift then the crux of your question towards the communication elements of it, because those are the ones that were affected, right? Exactly. So pre pre covid-19 restrictions of travel and gathering, we would implement one to one meetings. This are progress review meetings, for example, in-house here between the project manager or the program manager, the technical officers OK, between program management, program management officer and	and also to vienna or in the	Online and face to face communication in the project.

		technical officers, also between program management officer and my supervisors. Also, between program management officer and my project assistant, so internal meetings, this would normally be one to one, of course, Face-To-Face, but with the advent of this then became online meetings. Where we would be like this and basically do what we would otherwise do, whether it was sharing a document, going through a work plan and whatnot online. The same on the project uh implementation side now happened twice that before. The events that we would hold, for example, when we had meetings with teams coming out of the: let's say, out of Vienna, coming to Vienna, all teams meeting in country through regional training courses or regional meetings somewhere in Africa, that that that was not happening anymore. So uh Indeed, had a lot of face to face meetings, trainings, internal and external post covid. All of those have had to happen online. uhm I don't know whether that captures the crux of your question in terms of how that that changed. The communication was still there. But now most of it had to happen online		
{	{03:34}	The tools of Virtual Communication During the lock down the main one was uh. Teams and Webex followed by WebEx. And then there was Zoom, of course. But to a very limited degree, because uh in the agency, we use mostly teams and WebbEx but some colleagues outside of the camp or outside of the agency in their countries, that they are more accustomed to zoom. And sometimes we have to adapt to to that but yeah teams and WebEx Those were the key ones. Of course, WhatsApp has always been there. And I think I think also it increased a little bit the use of of WhatsApp for group calls.	Sometime Zoom Use of whatsapp for group calls	Teams and WebbEx whatsapp
		Remote working management	Office set up at home	
{	{05:12}	OK, apart from the fact that, of course, it was recommended at work for everybody to stay home and therefore I had to actually be under that framework uh at home, working from home at a personal level, I set up the same arrangement that I have at work. For	Work even more at home than in the office.	

	example, I have a space and an office and uh set up exactly the same here as at work and table screens. And I have a personal laptop that I used. But during the lockdown, I took the laptop with me to do work on it. And in that way then I was able to do apart from the phone, which I could not take with me home, I had the I had access to the systems just the way that I have access to them here at the office. And in that way, I was able to uh log in and and basically work the same hours that I worked even more actually work, the same projects that I that I would uh that I would work. So in that way, then at a personal level for arranging to work from home, the one thing that I did take with me from the office was, of course, the laptop so that I could get access. And that's it.		
{06:45}	The project could have been managed remotely all along	Can work from home efficiently.	Possible to work from home
	Oh, my goodness, yes. Wow. That for me, there's no question about it. In fact. When I was working from home, it was clear to me how much. How how how efficient, in fact, I could be working from the phone uh: You know, to the extent. How do I put this Nelly? So There's clear evidence because we did it that no one. So, so so, for example, for me, if I was to during the time that I was working from home, I did come to that point. I was so comfortable doing it that way that I felt like, yeah, what why why hasn't this been the case all along? I can work from home efficiently and. And even afterwards, if somebody was to ask me to say, hey, just now, pick now, do you want to come to the office or work from home? I would definitely be one of those people who would choose to work from home. I already mentioned that in terms of arrangement and access, I have the same access so no problems that. But also in terms of just uh: the the I'm a family man, so I don't know if I should go into all of those issues, but I found that the balance between the personal private life and work was more manageable or was efficiently manageable. When I was working, working from home, you know, I, I could go into explaining that, but but maybe this is enough for for your interview. your Question was whether I think this could all along be could be	Same access at home as in the office.	Yes  Good organization from home to manage between family life and work.

 		T	
	call you at this time. Things became easier. I don't know that I could say there was problems that to me it was not clear they would be solved as time would go by. It was a new experience that was already a challenge in itself. It was not time efficient at the beginning, but also in terms of solving problems that I would otherwise sold with colleagues. It took a bit more time to get to what I would get to an abnormal circumstances. So a lot of time wasted, basically trying to solve the same thing I can solve immediately if I was at the office with the same people. So time, time, time lost in trying to try to get organized under the new environment. That was the biggest thing for me. Otherwise, everything else was just was it was waas very positive. I mean.		
{12:58}	Work performance during Covid19 lockdown  Yes. Yes, because the biggest part of it is if one loses time. It means you take too long then to implement, for example, I implement 18 projects simultaneously, and if I'm losing time on one project, losing time on the other, just to implement it. Things slowed down a little bit, uh so, yes, even affected implementation. But if you're looking at the overall impact, I do find the net effect was that. There was really no net negative impact, as I say, for me, it was just the at beginning to get organized around, OK, how do I then get with my colleagues in Chad? What's the best way was the best timing. And then I began to make sure that, you know, people understood I was working from home. So they understood they were also working from home. So we began to work together and communication was a key part of it, to work together around saying, OK, how do we keep things moving, get the TO online, get the counterpart online, get online at the same time, and then you know have a meeting like we used to. But it took time to get to a comfortable position with All of this at which means at the beginning, yes, we lost time as we were trying to get organized. So, yes, some some bit of time lost and therefore lower implementation of projects. And overall, uh the net effect was zero because	concerning the implementation on the time. Lost of time in one project that means the other projects are also affected	Performance were negatively affected

	once we got going, then uh it was a new way of doing things altogether.		
{16:32}	Language barrier Oh, so the. This one has, as has always been the case, and I would not attribute that to, let's say online or not online, because, for example. I had a case where I had a colleague, for the first time, we were doing what is called local procurement. And I thought I was as clear as possible in English. This is a French speaking country in Chad. So I make things as concise and straightforward as possible to say, here's how we're going to do this process. I will send money to your country. You will go to the NDP, get the money, go to the supplier and buy the procurement, and then just send me the receipts. Right, the money got to the country, the counterpart went to the NDP, got the money and then bought goods from different suppliers than the ones we had agreed. Which is not really the problem. The problem was that when it comes to now the accounting for the funds, it wasn't clear how what we agreed meshed with what was done. It took many, many emails, uh phone calls and an WhatsApp messages to get to a point where we could clarify that. But to your to your question, I think. I will link that to the very problem that I mentioned before to say when you're talking to a person one to one, and you have that moment where you can really explain and get from the facial expressions and the gestures that the person we understand each other. That is more advantageous than waiting on line or working remotely, especially in different languages and an hoping that the message gets across, because in this case, clearly it did not get across. So, yes, that was a factor. But it is a factor all along, especially because of the multiculturalism that you mention. Uh Every single e-mail that I get, I have to read twice, once the ones that are written the second time to try and make sure that, OK, I get I understand exactly what is being said. Otherwise I get on the phone to talk about the very same communication. So it goes back to the isone multicultural environment. Yeah.	Sometime the written message is misunderstood, Take time to write many e-mails and that could be better solvedif they was no language barrier.  You use avery type of remote communication to transmit one information (e-mail, phone calls, video calls etc)	Language has always been a barrier.  But it were more emphasize when people where during the lockdown.  Once again, time consuming.

{19:33}

#### misunderstandings/conflicts

uh One of the things that I found because of the. OK. so the answer is no. Uh what I found was useful actually more than many times or more than before was this very idea of increasing threshold of empathy and understanding for each other. especially in that moment of a frenzy where people are getting into a new situation working from home. I knew what it was for me working from home because I have three boys at home and and therefore why it was even more sympathetic and empathetic. somebody, let's say we were online and they suddenly had to go into the other room to pick up the kids, that meant to me that it was OK. I could understand that you know it's not normal to do that, but under the circumstances, it was understandable. So I think I became. Of the thinking that I should increase my threshold of of empathy understanding, and in that way I think just doing that alone maybe avoided even conflicts I was not aware of because even, for example, we had one other counterpart. We tried three times to have a meeting, unlike we. So the first time it was a matter of time differences, which I had catered for, by the way. So we had a meeting. The technical adviser was on nine hours in line. We waited five minutes. And then I send a whatsapp message Nothing. Thirty minutes. Because the Technical officers and I were going through issues and whatnot, we did not just wait 30 minutes, the person was not there. So we decided, OK, we're going to cut the meeting. I send them an email. An hour later, the person logged in and said, hey, where are where are you guys? So you see. But the second time around, the country was experiencing problems with Internet. And then uh we had a meeting. We waited. People did not show up. You got the message that ah we we are having actual problems in our country, the Internet. So And there was at that time as well, where we set up this meeting to say, can we meet together? We need to discuss together at least the counterpart the TO and myself, so that we make sure that we move the project forward. But the meeting still did not happen. But even with that, one needed to be patient to

Increase threshold and empathy because he has the same issues.

Internet connectivity problems,

No conflicts

But technical problems and personal issues could have cause conflicts but it was manageable (empathy)

H Speaker	time {0057}	where we were experts from o country to go get experience in anothe country. Those did not happen. Exprocurement, where at least procurement, there was continued movement, there were cases whe suppliers themselves were saying, look because of covid-19 restrictions, we are unable to meet these deadlines providing the material that we supposed to be there. So that flight well, that was supposed to taprocurement from one country another. Those were delayed. So. (6)	ne er en for ed bk, tre for as as ke to	Research question  Les projets étaient gérés à distance et en présentiel.
	{22:58}	Yes, because you see the lockdown brought with it restrictions for moving experts from one country to another. It means for every one of the 18 project where I had planned to send an expeto say to Chad or to Togo or to Seneg I could not do that. And it's it's virtual in all of the projects where we we planning to have national trainic courses, like in the country, people come together for training. That did in happen where we were moving fellow to go for training from one country another that did not have scientific vis	cancelled for experts and fellowship.  Procurement also was cancelled.  Procurement also was cancelled.	•
		know that there are places where to Internet is going to be a problem at this and all that. And so while tension were high, we managed to to to to bring some of these uh situations to a place of understanding, especially my part, because for me, as a leader a program or as a manager, the fithing I need to do is, is to take the leadership. So, yeah, in times conflict, quite honestly, from my har No.  Achievement of the objectives:	nd ns to to on of rst at of	No, the objectives

corrections qui étaient demandées. Le projet repartait à l'échelon du pays avec un nouvel amendement de nouvelles corrections. Puis, il y avait une validation à l'échelon du TC et après une validation au niveau de la conférence générale, le pourcentage d'engagement du pays était donné. et eh Après le mois janvier février qui suivait l'élaboration du projet l'implémentation, des actions pouvaient être faites. Donc, tout a radicalement changé puisqu'une étape importante du projet était également la venue au VIC à Vienne, des équipes. Tu comptes faire partie du lot pour bien mettre en place l'implémentation des actions de coopération technique qui avait été décidée. Ah les input en pratique les activités et les input. Tout ceci n'a donc pas pu avoir lieu et tout a été remplacé par des formats virtuels, c'est à dire des téléconférences avec les différents counterpart Qui nous ont permis de les aider dans l'élaboration puis la correction du projet, c'est à dire la première étape lorsqu'on soumet le document, nous avons déjà pu les aider dun point de vue technique, par des conférences virtuelles et puis après, lorsque le document est venu pour le second review Design, nous avons pu également les aider avec ca, dans la mesure où il n'y aura pas de réunion présentielle au VIC, tout sera fait de manière virtuelle. D'accord, donc, on a substitué l'ensemble des actions. Physique et notamment l'action terminale qui devait se dérouler au VIC par des conférences virtuelles.

remplacés par le format virtuel.

Les outils virtuelles sont devenus formelles.

{03:08}

D'accord.

Je vais revenir à une petite chose qui était importante, peut être qui pourra vous aider? C'est que le fait que tout soit passé en virtuel par des téléconférences maintenant a donné une véritable dimension institutionnelle à ces choses. C'est à dire qu'avant, on se passait des coups de fils par WhatsApp, on se téléphonait, on organisait des conférences qui étaient un petit peu informelle et maintenant, grâce au fait que la téléconférence est

	véritablement un outil de communication nécessaire de fair la part d par la pandémie, on s'en sert véritablement à tous les niveaux. C dire avant, ce qui n'est pas du bricolage, mais ce qui des appels peut être un peu plus informels. Maintenant, c'est véritablement institutionnalisé, c'est à dire qu'on aide le Counterpart avec des virtuals meetings où participent les TO, Les PMO et differents counterpart. Donc ça c'est une chose qui est importante qui ressort vraiment de cette pendémie, c'est à dire que des choses qui étaient à l'état d'ébauche ou arrangées de manière un peu informelle sont maintenant institutionnalisées. et On l'a vu justement pour les review disign. le premier review disign et le second review design.		
{04:24}	The tools of Virtual Communication C'est essentiellement, ça a été zoom, ça a été team, ça a été Cisco WebEx hein. Ce sont les outils qu'on a utilisé avec plus ou moins de bonheur au niveau de l'agence Zoom était un peu compliqué parce qu'il fallait avoir recours à une application un peu spéciale heun et Pourtant, c'est pratique parce que beaucoup de pays la B Team a bien fonctionné et le webex, c'est un peu plus compliqué. Donc voilà, tous les outils de communication, ça a été ça. Ça a été les conférences à distance.		WebEx et Teams
{04:59}	Remote working management:  Alors, d'un point de vue personnel, moi j'étais très opposé aux working from home parce que je trouve que c'était plus important d'avoir du présentiel et puis ce serait m'embêter de rester à la maison. toujours un espèce de sentiment, un peu de mauvaise conscience et puis on se rend compte que finalement, on est beaucoup plus concentré à la maison. Si on n'a pas les enfants dans les pattes, uh c'est mon cas parce qu'on peut véritablement organiser son travail comme on le veut. Faire des pauses quand on veut, quand on se sent moins	Plus de concentration à la maison car liberté d'organisation  Créativité se développe plus lorsqu'on travaille à la maison.  Plus de concentration à la maison  Propose une solution hybride	Au départ c'était difficile mais maintenant, le télétravail se gère très bien.

	concentrá en plant and divident		
{06:23}	concentré, on n'est pas du tout perturbé par les intervenants extérieurs, nos confrères, nos collègues, le téléphone. Et finalement, on a une concentration beaucoup plus importante. Et je dois dire qu'il y a une notion qui est sortie de ce monde, c'est que la créativité développée, c'est à dire quand on est dans le cadre institutionnel du bureau, on a son environnement, son ordinateur, ses meubles. Mais l'esprit n'est pas ouvert à la créativité. et je trouve que le fait d'être chez soi, dans un environnement neutre, bienveillant, favorise cette créativité, c'est à dire que ça donne plus de de coent dire de sensibilité dans le projet. On se met mieux à la place du conteur par on analyse mieux la situation, on introduit une dimension humaine que la VIC ne nous donnait pas. donc ça c'est un point important aussi qu'il faudrait sur lequel il faut insister. C'est la créativité.  Donc moi, je l'ai géré, j'ai très bien géré et j'étais récalcitrant au départ et maintenant, je pense qu'au contraire, c'est quelque chose qu'il faudrait développer. Pas moitié moitié parce que ce serait trop. Mais trois jours en présentiel et de jour en		
{06:42}	backing. Ça serait bien.  The project could have been managed remotely all along Oui, oui, je pense que oui. Et ça n'a été la preuve de quelque chose que l'on supputais. Comme je vous disais, on a institutionnalisé ces communications, mais c'est quelque chose qui vraiment aurait pu se faire.		Oui sans hésitation
{06:58}	Encountered difficulties  alors Ça a vraiment une chose. Il	Difficile de lire le body language et les émotions	Réseaux de communication souvent
,	faut vraiment insister, c'est qu'il faut un réseau de communication analytique qui soit parfait parce que c'est absolument insupportable. quand on entend parler les gens quand on les entend mal quand quelq'un et même ça se passait à l'échelon de l'agence. On était tous un peu surpris de voir que il y avait des bugs techniques alors que ça	l'écran est à la fois un défaut et en même temps un avantage car permet d'être d'une part objectif et en même temps se faire une representation biaisé car on a que	défectueux. Difficultés relationnelles.

{08:13}	ne devrait pas exister. Et ça, c'est quelque chose qui est vraiment très pénalisant. Ça ne peut marcher que si et seulement si ça, c'est vraiment très important. La technologie, la technique, ça, c'est quelque chose qui est fondamentale On s'est rendu compte dans. Pas mal de pays africains, on a. moi, j'ai j'étais assez surpris parce que je pensais qu'il y aurait des points techniques fièrement, ça pas si mal marché que ça, mais quand ça ne marche pas, ça ne marchera pas. Voilà donc globalement bonne surprise parce qu'on s'est toujours uh vu la distance. L'équipement est bon, ça marche bien, mais quand ça ne marche pas, ça marche pas, ça marche pas.  Il y a peut être aussi des difficultés relationnelles qu'il faut voir, c'est à dire que. Dans le face to face, on a une dimension humaine qu'on ne retrouve pas, bien évidemment virtuelle. C'est un peu une lapalissade et c'est quelque chose qui peut être important. C'est vrai qu'on manque un petit peu ce côté humain, présentiel, chaleureux, mais qui, dans certaines circonstances, peut être utile. Aussi tu à dire que lorsqu'on s'engage physiquement dans un dialogue, dans une relation, on fait intervenir un mode relationnel un peu implicite qui peut parfois fausser la décision qu'on doit trouver la personne en face de soi, extrêmement sympathique ou uh qui avance des arguments qui sont plus du domaine comment dire de l'intuition, de la sensibilité. Là, on est affranchi, donc c'est à la fois un défaut, un écran, c'est à dire que ça vous affranchi de la relation humaine, physique et directe. Mais à l'inverse, ça vous protège parfois comme une espèce de, paravant une réaction de sensibilité. Est ce vous voyez ce que je veux dire.	la voix de la personne et pas d'émotion.	Meilleurs
{09:51}	Work performance during Covid19 lockdown C'est ce que je veux et je pense qu'on est plus performant.	Plus performant à cause de la concentration	performance

	Paradoxalement, je pense que tout le monde vous le dira parce qu'on est plus concentré, parce qu'on organise son temps, parce qu'on n'a pas de bruits parasites. C'est c un peu important, surtout avec ses. moi je n'étais pas du tout habitué à travailler la porte ouverte. C'est quelque chose qui vous voyez vous même aussi. Vous l'avez fermé la porte et c'est important. Et c'est quelque chose qui me gêne et que je n'ai pas retrouvé à la maison. Donc, ça s'est très bien contre. Je pense qu'on augmente ses performances à condition de savoir qu'on va tous un jour pouvoir avoir une réunion vraiment présentiel.		
{10:28}	Language barrier Alors pour moi, non, parce que je suis francophone. Je reconnais que. Et ça, c'est important à souligner lorsqu'on a eu des meetings. Certains TO ici ne sont pas francophone donc lorsqu'on parle avec des pays francophones uh et qu'on ne peut pas parler anglais. C'est plus difficile quand on a travaillé. C'est comme au téléphone quand on en discute dans la rue avec quelqu'un en anglais, même si on n'est pas très bon. Ça passe mai je sai pas si vous avez remarqué que le téléphone, c'est vachement difficile quand on ne voit pas l'interlocuteur et c'est un peu pareil. Donc, j'ai senti que certains pays, certain counterpart qui n'étaient pas complètement fluent en anglais, avaient des difficultés lors des communications virtuelles qu'ils n'auraient pas eu je pense en présentielle parce qu'on parle plus avec ses mains, parce qu'on écrit, parce qu'on dessine le fait justement d'avoir uniquement la liaison uh en network et ça oui stai peu difficile pour les langues. Je crois que. Ça, c'est quelque chose d'important, important.	Difficile pour le counterpart qui ne parle pas forcément l'anglais.	Ce n'était pas compliqué.
{12:06}	Advantages of Remote working Ce qu'il faut retenir, c'est que le format virtuel. PRIVE de cette subjectivité que peut donner le côté sensible et le côté humain d'une		Avantage: objectivité, liberté d'expression.

	discussion et à l'inverse, garantit une parfaite objectivité, c'est à dire qu'on est protégé par son écran et on peut dire des choses qu'on n'aurait pas pu forcément dire en présentielle à cause des relations qui peu s créé. ça c'est quelque chose qui est important.		Inconvenients: Pas de sensibilité aux émotions
{12:32} {13:13}	misunderstandings/conflicts  (rire), eh c'est drôle d'ailleurs. bah l'incompréhension, oui, parce que je vous dit quand y a des problèmes techniques épouvantables. Plus personne ne sait de quoi il parle. Il faut voir qu'on se coupe plus facilement la parole em en virtuel qu'en présentiel. Parce que là aussi, il n'y a pas la dimension affective. Donc uh, on peut être plus distant, peut être plus cassant uh des conflits.  Alors oui, je pense que pas des conflits, mais des réserves. Je pense que effectivement, comme je vous expliquais il manque cette dimension humaine et que les gens les counterpart n'étaient pas habitués à ce format là. alors déjà, on va tous se réunir dans une pièce et j'ai vu que certains de nos confrères souffraient beaucoup parce que la pièce n'est pas forcément climatisée Le micro, on sait pas qui s'adresse ou il faut tourner la caméra vers là. Tout le monde parle en même temps, c'est un peu compliqué. Alors on a senti un petit peu une soudaine. Vous savez, on fait ce qu'on appelle des des projets à long terme, on rédige des documents et toutes les équipes sont réunies. Et là, c'était un peu la foire d'empoigne. Effectivement, on ne savait plus qui était qui, qui parlait. On est obligé de couper la caméra parce que ça prend du réseau. On est pas bien. Donc ça peut générer peut être pas un conflit, mais un certain énervement. Ça, c'est sûr. Là aussi, il faut que la technique suive. Mais ça, c'est vrai que c'est quelque chose qui était très important.	Les problèmes techniques pouvaient influencer les humeurs des gens.  Exemple du counterpart qui a tenu des propos qu'il n'aurait forcément pas avancer en présentiel.	
	dans un pays, ca ca pas une		

	arrogance, mais du coup, plus de pas d'agressivité, mais peut être plus de détermination d' propos du counterpart. Parce qu'il me souvient justement, on se battait, uh dire c'est une litote hein. On discutait un pti peu pas rudement, mais de manière vigoureuse sur le projet. C'était sur l'installation d'un équipement particulier. Moi, je trouvais que c'était un petit peu litigieux parce que je n'avais pas toutes les informations et je sentais qu'on ne les donnait pas toutes, notamment sur le mode de financement. Et c'est vrai que de par ce format virtuel qui protégeait le counterpart, il s'est permis d'avoir une certain uh pas agressivité. Mais voilà des propos, je pense qu'il n'aurait pas tenu si on avait été invité en présentiel. Ça, c'est quelque chose qu'il faut vraiment, je pense bien bien souligner hein ce ce ce rapport qu'on a différent.		
{17:15}	Conflict management  bah Moi, je ne suis pas un homme de conflit, alors peut-être pas la meilleure personne. Mais j'ai écouté, j'ai essayé d'influencer. Et puis, au final bah ça a marché. Ça dire qu'on m'a donné les informations que je voulais et qui m'ont pas tout à fait satisfait	En cas de non satisfaction abandon?	Rester à l'écoute.
{17:38}	Feedback from the other team members  Globalement, on a tous été assez contents. Moi, je crois que la, les trois points qu'il faut des sur lequel il faut insister, c'est ça. c que On a définitivement pris conscience que l'on pouvait, grâce à cet outil virtuel, organiser en amont du projet, ca v dire en amont de sa validation des consultations pour aider à la rédaction. C'est le premier review disign pour le second, review design, aidé pour les actions correctives qui n'ont pas été vraiment faites comme on le pensait par le pays. donc oui tout ce qui se faisait au téléphone avant par les email et tous ça et eh ben on dit non. Maintenant, allez, on s'organise Une réunion, ça dure une heure.	Possibilité d'organiser des virtuels en amont  Le virtuel facilite et est "extrêmement extrêmement utile pour l'élaboration et la correction 3 points à retenir: Plus de concentration lorsque l'on travail à la maison  Plus de fermeté dans les décisions pris de manière objective à cause de la barrière de l'écran.	

C'est rapide, vous savez qu'on peut share document donc on peut anoter Et ca, c'est le premier point qui, je crois, est très important. C'est que on peut maintenant d'emblée dire que en amont du projet, en amont justement, de cette réunion physique devait se tenir ici. On peut faire un tas de choses qui sont pour utiles extrêmement counterpart parce que on peut chez on peut chez de partager les documents, on peut l'aider et lui dire non. Regardez ici sur le 1point 2point 3. Eh bien, c'est ça qu'il faut mettre. Vous êtes pas en accord avec votre projet. Voyez ça. On a institutionnalisé des choses qui, avant, étaient floues. hein D'accord, donc ça, c'est vraiment un point important. On s'est rendu compte que l'on pouvait utiliser cet outil de manière extrêmement utile pour l'élaboration et la correction du projet avant sa validation ca C'est une chose qu'il faut voir. Le deuxième point, c'est que Voilà. On a augmenté la concentration par le working from home. concentration et la créativité. On est détaché du carcan de l'agence et on est plus créatif. On se met plus à la portée du counterpart. On a plus d'idées et ça beaucoup d'entre nous l'ont dit. Et le troisième point, c'est que cette distanciation qui, du fait de l'absence de contacte physique hein, de se voir de de se serrer la main, de se rapprocher lors d'une discussion, vous savez hein c'est la dynamique du corps. On se rapproche, on se recule en fonction des des choses. Et bien ça, c'est quelque chose qui peut être extrêmement utile parce qu'elle donne plus d'objectivité, parce qu'elle permet peut être d'être plus ferme dans ses décisions. Mais à l'inverse, elle prit une certaine uh dimension humaine de la relation. Mais ça peut être utile aussi. D'accord, pour moi, c'est les 3

points qu'il faut mettre en avant.

Plus de dimension humaine dans les relations professionnelles.

Interview 9 conducted in French

I

Speaker	time	Topic:	Memo	Research question
	{00:26}	The way of working before and after Covid:  Alors, disons que la grande différence entre avant et après est essentiellement liée aux réunions qui, avant été présentielle et après, elles sont devenues virtuelles. Mais du point de vue de la préparation des projets de discussion des projets, ça a toujours été par part par voie informatique, donc par ordinateur, avec un réseau et donc les gens qui étaient dans la maison, on pouvait utiliser ce programme. Les gens qui étaient à l'extérieur pour se connecter avec un mot de passe personnel et modifier les programmes, donc du point de vue. Cette question est un peu peu disons difficile à répondre parce que du point de vue pratique, rien n'a changé étant donné que on était en par ordinateur. Par contre, du point de vue vraiment, sur le terrain, tout a changé parce que toutes les réunions que l'on faisait, comme on fait là maintenant les yeux dans les yeux, se passaient se passe, se sont passées après, par ordinateur, par WebEx. Et ça, y a des avantages et des inconvénients. L'avantage, c'est que clairement, les gens n'ont pas perdu du temps pour venir ici. On a pu choisir une date qui était convenable pour tout le monde, alors que sinon, c'était une date fixe. Tu pouvais pas venir, mais pas le gros inconvénient, c'est que clairement, les relations humaines sont différentes parce qu'il y a des problèmes techniques liés aux connexions, surtout si, si, c'est des pays où l'internet n'est pas très, très bon. Et je suspecte aussi fortement que quand on fait ces réunions, il y a toujours un qui écoute et l'autre qui fait autre chose. Donc, voilà ça, c'est la grande différence entre avant et après.	Choix de date convenable pour tout le monde  Problems d'internet "Je suspecte aussi fortement que quand on fait ces réunions, il y a toujours un qui écoute et l'autre qui fait autre chose	Souligne le côté hybride avant le covid et cela s'est amplifié lors du confinement.  Souligne les avantage ici: pas de perte de temps pour se rendre au travail,  Inconvénient: capter l'attention des gens.  Probleme technique
	{02:33}	The tools of Virtual Communication WebEx, essentiellement WebEx ou similaires. Non. Ici, on utilise beaucoup WebEx, mais il y a eu aussi toutes les autres troupes Microsoft Teams, y a eu beaucoup de programmes. Maintenant, je me souviens plus. Meeting. Bon et puis zoom dans Zoom, ça existe ou non? Zoom C'est celui que j'aime le moins de tous. Parce qu'avec notre ordinateur, il y avait toujours des problèmes de compatibilité. Et donc, c'était ces programmes là utilisés.		WebbEx Teams

	Donc très, très rarement par téléphone. C'était essentiellement.	
{03:23}	Remote working management J'ai eu la chance d'avoir tous les outils informatiques possibles et j'ai été fournie d'un casque avec un micro un bon micro. J'avais ce qui est très, très important pour nous, mais je pense pour tout le monde. Deux écrans. Donc j'avais l'écran de mon ordinateur portable, plus l'écran un écran secondaire qui était très utile. Et aussi, ce qui est très important j'étais en bureau virtuel, c'est à dire que c'était comme si j'étais ici, donc j'ai eu accès à toutes tous les dossiers comme si j'étais ici et c'est très important. Je sais qu'il y a une partie de la maison qui ne peut pas faire ça. Donc il faudrait peut être que vous allez interroger ces gens là parce que pour eux, c'est pour nous, vraiment. Moi, personnellement, je ne voyais pas de grosse différence et des interactions sociales entre travailler chez moi et travailler ici. Juste l'imprimante, le scanner, je n'utilise pratiquement jamais. Pour le reste, j'avais tout à disposition.	Outils IT à disposition  Aucune différence concernant la gestion du travail à la maison et au bureau.
{04:37}	The project could have been managed remotely all along Oui. D'ailleurs, je pense que si on pouvait augmenter la plage du travail à la maison, ce serait pour moi le plus. C'est plus simple, ça évite de venir ici. Mais bon, c'est vrai que, je répète, il faut quand même. Il faudrait quand même pas lâcher. Mis à part le problème de la contagion, je parle un jour où tout sera calme. Ce serait bien de faire d'autres jours ici, deux jours à la maison, mais ça, c'est une idée que je pense parce que en même temps, on garde les contacts de l'équipe parce que c'est très important, que je sache ce que fait ce que Olivier fait. Mais rester à la maison. On peut très le bien faire.	

	Encountered difficulties		
	L'énorme différence qui a eu entre avant Covid et après Covid, je ne sais pas c'est pour ça je ne l'ai pas dit, parce que je pensais que ça venait, mais je vais le dire maintenant, ce sont les missions à l'étranger. Clairement, depuis deux ans, on ne va plus à l'étranger. Ses missions à l'étranger ont été partiellement remplacées par des missions virtuelles. Ça peut être utile. Je ne dis pas non, mais c'est clair qu'il y a eu un gros manque. Donc ça, c'est le plus grand. C'est ces missions sur place pour comprendre exactement ce dont ils ont besoin, pour avoir une idée d'où ils sont. Comment? Quels sont les rapports avec les autres membres de l'hopital? Ça, c'est quelque chose qui, effectivement, nous a manqué beaucoup. Tout le reste, tout ce que je vous ai dit avant, c'est le travail administratif de tous les jours. Ça, c'est une chose simple faire faire à la maison, mais clairement les missions ne peut pas le faire, c'est évident.	Impossible de faires les missions à l'étranger	
{06:59}	Work performance during Covid19 lockdown Bah a mon avis oui. Pour cette raison là, pour cette sa pas, pour le travail de disons bureaucratique, mais pour les missions sur terrain. Tout à fait tout à fait. On les a fait quand même. Je répète on les a fait , mais l'impact était beaucoup moins évident.	Des missions sur le terrain ont quant même été faites mais l'impacte se fera remarqué dans le future.	La performance par rapports aux missions effectuées. On ne peut que mesurer l'impact dans le future.
{07:34}	ses missions sur place sont des missions qui ont pour but de programmer le futur. Donc peut être, on n'en voit pas encore les effets maintenant, parce que maintenant, on travaille sur les projets qui ont été établis déjà avec des missions qui avait été faite avant Covid. Mais je crains que pour le futur, il y aura. donc l'impact pour l'instant minime. Mais le danger est fin voila.		

{08:15}	Language barrier  Non pas pour moi, pas pour mes pays, parce que j'ai des pays anglophones et francophones, donc je peux communiquer sans problème dans les deux cas. Or, il est possible que d'autres, dans notre cas, ce sous soit différent. Mais dans mon cas, ça n'a pas été le cas du tout. Après moi, je pense que si elle existe cette barrière linguistique, elle est certainement plus difficile à franchir quand on est en virtuel que quand on est en réel, parce qu'il y a des choses qu'on peut se dire beaucoup plus facilement en tête à tête que sur une ligne téléphonique qui peut être une ligne Internet. Donc donc, logiquement, votre issue est juste, mais dans mon cas, il n'y a pas eu de problème.	Pas de barrière de langue parce que I est bilingue;
	Advantages of Remote working	Souligné dans la première question.
{09:10}	misunderstandings/conflicts  De mon côté, je j'en ai pas eu et je n'ai pas de connaissances. Il y a eu des moments d'angoisse parce qu'on ne savait pas trop bien quoi faire.Pas vraiment de conflit plus un problème de comment on va faire parce que on ne peut pas vraiment les aider mais pas vaiment de conflit.	Pas de conflit durant le télétravail. Par contre angoisse dû à l'adaptabilité.
{09:50}	Remote working could have been done all along.  Alors ça, c'est dans le sens bon de la situation, c'est que clairement, on ne peut pas faire de mission toute l'année et dans tous les pays parce que j'ai 30 pays, je ne peux pas aller par contre, organiser une réunion web, c'est assez facile. Donc, j'ai eu le sentiment d'être un peu plus proche de leurs besoins maintenant plutôt qu'avant, parce que j'ai pu aller contacter des pays où je ne pensais pas aller avant. Voyez donc ça, c'est l'avantage des réunions WebEx, c'est que dans les situations où il faut vraiment en présence, malheureusement, je n'ai pas pu le faire, mais dans les situations ou simplement un appel pour savoir si ça va. S'ils ont besoin, pourquoi ils ont des problèmes pour démarrer le projet, ça c'est très simple à faire et je pense qu'on a appris à le faire mieux parce qu'avant on aurait pu le faire	Oui clairement.

très bien parcequ'on avait les moyens mais on ne le faisait pas. Alors que maintenant on le fait.	
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#### Annexe 7:

# **Email sent to the participants**

Object: Survey on the effectiveness of TCAF National Training Courses

Dear participants to IAEA training courses

My name is Nelly Compaoré, and I am an intern in the Division for Africa at IAEA's Department of Technical Cooperation. As part of my internship, I am conducting a study on virtual communication and project work. In this regards, I would be grateful if you can complete the questionnaire below by next week on August 26. It will take about 5 to 10 minutes to do it. Your participation to the survey will help better understand the appropriateness and the effectiveness of virtual training courses. Your responses to the survey will be treated completely anonymously.

Please click on this link to participate in the survey.

Best regards,

Nelly Compaoré

IAEA Intern

#### **Annexe 8**

#### Survey questionnaire

### Virtual communication and project Work

### Study of the effectiveness of National training courses

To which thematic area does your training belong?

- Health and Nutrition
- Food and Agriculture
- Water and the Environment
- Industrial Applications/Radiation technology
- Energy Planning and Nuclear Power
- Radiation Protection and Nuclear Safety
- Nuclear Knowledge Development and Management

## Which virtual training courses did you attend?

- Quality Management System at Rwanda Standards Board (22-30 march 2021)
- Soil, Water and Nutrient Management (21-22 April 2021)
- Isotope Hydrology and Introduction to IWAVE for Kenya (1-18 May 2021)
- Quality Management System (QMS) and ISO/IEC 17025:2017 Requirements in Radioanalytical Laboratory (31 May-11 June 2021)
- Selection Methods in Mutation Breeding in Cereals and Legumes (14-24 June 2021)
- Improved Soil, Water and Nutrient Management for Cassava, Sorghum and Sugarcane and the Role of Nuclear and Isotopic Techniques (8-9 April 2021)
- Training on Distance Interactive Tutorials & Procedures Preparation (12-15 July 2021)
- Radiation Protection Medical Application and Safety Culture TSA3 (17-21 May 2021)

Part 1 Somewhat

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	agree	Strongly agree
The contents of this virtual training were adapted to the thematic			Ü		
I was concentrated during the course					
The course duration was appropriate					
The technical aspect was appropriate (internet connectivity, tools)					
I prefer having virtual training					
I prefer hybrid training I prefer face to face training					

# Part 2

	Strongly	Somewhat	Neither agree	agree	Strongly
	disagree	disagree	nor disagree		agree
I had an evaluation					
before the course					
I had an evaluation					
after the course					

The form of the	, ,	Somewhat		agree	Strongly
evaluation was	disagree	disagree	nor disagree		agree
Theoretical based	_	-	-		_
Practical based					

# Part 3

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	agree	Strongly agree
I have started to apply the					
knowledge after the					
course					
I will start applying the					
knowledge later					
I will never apply the					
knowledge acquired					
during this training course					

# Part 4

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	agree	Strongly agree
I did not meet any difficulties during the application of the knowledge			, and the second		
I was satisfied with my results after application of the knowledge					

#### Annexe 9

# Results of the survey

