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FINAL EXERCISE REPORT (FER)

RESILIENT RESPONSE 2020

(RERE 20)



Federal Office
of Civil Protection and
Disaster Assistance



Hybrid CoE



"The virus knows no borders."

Josep Borell,

EU Representative for Foreign Affairs, 2020

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1. INTRODUCTION

Starting point for the wargame RESILIENT RESPONSE 2020 (RERE 20) was a civil/military workshop conducted by the Multinational Medical Coordination Centre / European Medical Command (MMCC/EMC) in the beginning of March 2020. “The WS laid a foundation for efficient multinational civil-military cooperation for an even better preparedness and surge requirements for an outbreak scenario and major incidents within a MASCAL scenario. For the further work it was suggested to conduct a wargame with pandemic focus. This has been the starting point for the wargame Resilient Response 2020 (RERE 20)”¹.

Based on the development of the COVID-19 pandemic, MMCC/EMC decided to conduct the event as an almost complete online participation. Two main risks for the wargame had been identified in advance: There were technical issues concerning the implementation and the insight that an on-site presence of EXCON in KOBLENZ would be needed.

The wargame RERE 20 was organised and planned in accordance with Bi-SC 75-3² and the UK MoD Wargaming Handbook.

2. SUMMARY OF ACTION ITEMS

- a. MMCC/EMC will share the exercise’s observations and Lessons Identified (LI) for the benefit of the work and standardisation efforts of the Committee of Chiefs of Military Medical Services in Working Groups (WG)/Panels.
- b. European Union entities with responsibilities in crisis response such as EUMS, DG SANTE und DG ECHO will benefit from experiences made during this wargame through tested communication lines with the EU/NATO member nations and NATO stakeholders.
- c. MMCC/EMC will develop and establish a regular exercise cycle, offering a range of adaptable medical wargames.
- d. MMCC/EMC will use the experience collected during this exercise for Medical Crisis response and Medical Command and Control concepts for crisis and conflict operations of EU and NATO.
- e. MMCC/EMC will share the observations and LI with the NATO Centre of Excellence for Military Medicine (MILMED COE) for their lessons-learned process.

¹ “Resilient Response 2020 a web-based wargame with a focus on pandemic response and hybrid threats”, in European Military Medical Services (EMMS) 2021, Article to be published April 2021

² NATO Bi-Strategic Collective Training and Exercise Directive 075-003, dated 2 October 2013

3. EXERCISE ABSTRACT

3.1. Identification of exercise

The online wargame RESILIENT RESPONSE 2020 (RERE 20) was planned, designed and conducted as a cooperative project by the MMCC/EMC, the European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE) and the German Federal Office of Civil Protection and Disaster Assistance (BBK) in KOBLENZ, GERMANY. Additionally, first cooperative activities started under the lead of King's College London that organised a workshop captioning wargaming the Pandemic's Effects

The wargame took place from 23 to 27 November 2020 focusing on providing an interdepartmental (cross-sector) multinational epidemic/pandemic wargame. As such, the participating nations played four consecutive turns representing stages of a pandemic over the course of three days. Each turn focused on a specific characteristic of a pandemic including hybrid influencing factors and integrated best practices and lessons identified of the COVID-19 pandemic first wave.

The participants consisted of more than 117 experts from health, civil protection and security sectors, plus 12 national teams as the Training Audience.

The White Cell consisted of attendees from NATO HQ (IS OPs Div, EADRCC), EU (DG ECHO, DG SANTE, EUMS) and USEUCOM. The role of the Red Cell was taken over by the Hybrid CoE. Represented by the United States European Command (USEUCOM), the USA Medical Service was also involved in the wargame as a Response and Support Cell. The observers were from – among others – King's College London, Supreme Headquarters Allied Powers Europe (SHAPE), Joint Support and Enabling Command (JSEC), the European defence Agency (EDA) and the Centre of Excellence for Military Medicine (MILMED COE). Apart from hosting the event, the MMCC/EMC also took over the role of a facilitator for nations, civilian and military stakeholders of EU and NATO. Six of the national teams were mixed (civilian/military), three teams civilian only and three teams military only. From the 117 participants, 73 were male and 44 female. The average age of the team members was 43 years.

3.2. Officer Scheduling, Conducting and Directing the Exercise (OSE, OCE, ODE)

OSE: Major General (MC) Stephan SCHOEPS, MD– Deputy Surgeon General of the Bundeswehr Joint Medical Service

OCE: Brigadier General (MC) Dr Stefan KOWITZ, MD – Director MMCC/EMC

ODE/EXDIR: LTC Ronnie MICHEL – Branch Head Wargaming/Exercises MMCC/EMC

CHIEF EXCON/SIM: LTC (MC) Maren KOSAK, MD – Branch Head CivMil MMCC/EMC

LEAD FACILITATOR: Dr Martin WEBER – BBK

LEAD EVALUATOR LTC Jürgen MUNTENAAR – Ops Branch MMCC/EMC

FRAMEWORK/ADMIN: LTC Berthold THEUS – Wargaming/Exercise Branch MMCC/EMC

3.3. Exercise Aims (EAs) and Exercise Objectives (EOs)

3.3.1. Exercise Aim

RERE 20 aims at further enhancing the enablement of the member states to manage a cross-sector multinational crisis. For this, the nations can train the civil/military response to an epidemic/pandemic influenced by hybrid threats.

The focus lies on decision-making, communication and coordination of civil protection, health care and military sectors.

3.3.2. Exercise Objectives

EO1: To train the whole of government response to a crisis situation (epidemic/pandemic) influenced by hybrid threats on the base of existing emergency concepts, best practices and Lessons Identified (LI)/ Lessons Learned (LL) during the COVID-19 pandemic.

EO2: To increase the awareness of decision-makers on the complexity of decision-making.

EO3: To train cross-governmental coordination and cooperation within an epidemic/pandemic hybrid crisis scenario.

4. EXERCISE DESCRIPTION

4.1. Participants

4.1.1. Composition of training teams as the Training Audience (TA)

- a. Croatia (HRV)
- b. France (FRA)
- c. Germany (DEU)
- d. Great Britain (GBR)
- e. Hungary (HUN)
- f. Latvia (LVA)
- g. Luxembourg (LUX)
- h. Netherlands (NLD)
- i. Portugal (PRT)
- j. Romania (ROU)
- k. Spain (ESP)
- l. Sweden (SWE)

4.1.2. Exercise staff included the following

- a. EXCON, including Simulation Cell to coordinate the wargame and Lead Facilitator
- b. HI/LOCON, including a
 - a. White Cell, consisting of attendees from NATO HQ (IS OPs Div, EADRCC), European Union (DG ECHO, DG SANTE, EUMS), USEUCOM and MMCC/EMC
 - b. Red Cell, organised and manned by the European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE)
- c. EVAL, including Adjudication Cell organised by the MMCC/EMC Plans & Ops Branch with external support

4.1.3. Observers

- a. Kings College London
- b. Supreme Headquarters Allied Powers Europe (SHAPE/NATO)
- c. Joint Support and Enabling Command (JSEC)
- d. European Defence Agency (EDA)
- e. NATO Centre of Excellence for Military Medicine (MILMED COE)
- f. CIMIC Centre of Excellence (CCOE)

4.2. Development, planning and organisation

A complete overview of WARGAME DEVELOPMENT, PLANNING AND ORGANISATION can be found in ANNEX A.

4.3. Scenario

The game design was derived from a wargame developed by the US Naval War College senior wargaming expert³.

RERE 20 simulated a crisis environment with a focus on European countries and organisations and was divided into four turns:

Turn 1: Initial response to the pandemic,

Turn 2: Managing the pandemic,

Turn 3: Second wave phenomena,

Turn 4: Overcoming the pandemic.

Three simulation models have been adapted for the exercise: a virus model, an economic model and the so-called sentiment model.

The breakout sessions after each turn were used to discuss details and provide better knowledge of different actors and institutions of NATO and especially EU (instruments of the EU Civil Protection Pool and rescEU capacities), as well as cooperation mechanisms and providing additional information regarding hybrid threats. “The wargame has been introduced by the keynote speech of Lieutenant General Martin Bricknell, who served as Surgeon General of the British Armed Forces from 2018 to 2019. Based on his appointment as a Professor of Conflict, Health and Military Medicine at King's College London and advisor to their Centre for Military Ethics, he provided an overview of the involvement and the supporting role of the medical services of NATO Armed Forces during the first wave of COVID-19”⁴.

4.4. Evaluation and Adjudication

RERE 20 primarily targets military and civilian professionals and practitioners within civil and military authorities and agencies who already possess a level of knowledge about crisis response operations in general. The evaluation and adjudication as written in the evaluation manual are part of MMCC/EMC's procedures aimed at supporting participants conducting and experiencing exercises in such a way that ultimately the benefits (increasing knowledge & experience) outweigh the effort of taking part (time & effort).

³ Pete Pellegrino is a retired USN commander and former Naval Flight Officer, currently employed by Valiant Integrated Services supporting the US Naval War College's War Gaming Department as lead for game design and adjudication and lecturing on game related topics for the department's war gaming courses.

⁴ “Resilient Response 2020 a web-based wargame with a focus on pandemic response and hybrid threats”, in European Military Medical Services (EMMS) 2021, Article to be published April 2021

4.4.1. Evaluation definition

The MMCC/EMC defines evaluation during their activities as follows: Evaluation within MMCC/EMC organised activities constitutes the systematic and transparent collecting, analysis and assessment of information about the activity, its characteristics and outcomes to enable understanding, learning and individual and organisational improvement.

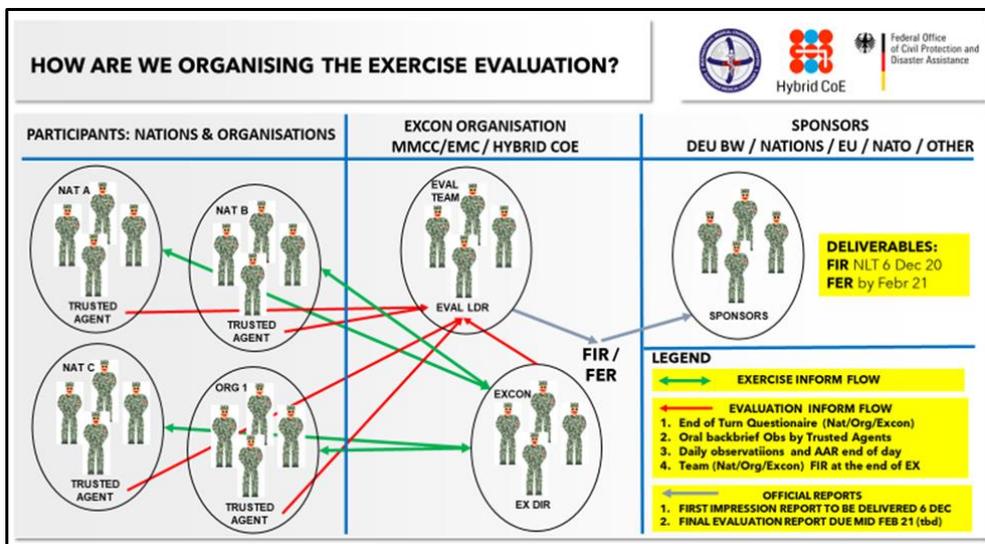
4.4.2. Evaluation method

For the Exercise RERE 20, the MMCC/EMC Lead Evaluator has chosen the goal-based evaluation as the appropriate method. Goal-based evaluation is used to determine the extent to which programs are achieving their overall, predetermined objectives and is largely deal with the projected benefits and results of an exercise. Therefore, a this method is about comparing observations of the exercise’s results with its purpose and objectives as stated under chapter 3.3., Exercise Aim and Objectives (EO).

4.4.3. Evaluation concept

Planning for how the evaluation would be conducted started with the direction that was provided in the Exercise RERE 20 concept. The evaluation concept therefore takes into account the special environment and the online nature of the wargame. The participants all are in their respective nations, therefore the evaluation of decision-making and responses given need to be done via several methods.

1. Observations made by the Lead Evaluator and his team on the exercise information flow between participants and EXCON as seen from the EXCON perspective;
2. Questionnaires provided to the teams Trusted Agents at the end of each turn;
3. Short virtual backbrief / discussion with Trusted Agents at the end of each turn;
4. After Action Review (AAR) at the end of each day;
5. First Impression Reports at the end of the exercise written by each team including EXCON.



5. ACHIEVEMENT OF THE OSE'S EOs

The wargame was successful in achieving the OSE's EOs to improve the participants' reactions and interactions towards the currently perceived threat - a pandemic with hybrid threats in a multinational setting. During the three days of the wargame, the TA experienced a multitude of events, which demanded determined decision-making under the consideration of other influential factors in order to run an effective medical support system throughout the operation. The multitude of Subject Matter Experts (SMEs) in combination with the facilitators embedded in their respective teams and their knowledge of the multinational TA environment guaranteed a permanent presence of knowledge - so that already during the wargame, but especially with the help of breakout sessions, after every turn a significant amount of experience could be achieved.

EO1: To train the whole of government response to a crisis situation (epidemic/pandemic) influenced by hybrid threats on the base of existing emergency concepts, best practices and LI/LL during the COVID-19 pandemic. - ACHIEVED

This EO was accomplished during all four phases of the wargame. The TA was able to classify the hybrid threats and respond to them according to game rules. A number of sometimes contentious but very fruitful discussions took place between all involved participants. There were several debates about capabilities and assets, operational approaches and the mitigation of challenges.

EO2: To increase the awareness of decision-makers on the complexity of decision-making. - ACHIEVED

This EO was also accomplished during all four phases of the wargame. The TA had to keep all levels in mind from the beginning, since its decisions have an equal impact on the development of the pandemic, but also on the economic development and the sentiment of the population.

EO3: To train cross-governmental coordination and cooperation within an epidemic/pandemic hybrid crisis scenario. - ACHIEVED

The development of the pandemic, the rising number of infections and the rising infection rate over time forced the TA to develop strategies to deal with the casualties throughout all responsible levels. The deliberate need for coordination from nations with each other and EU as well as NATO generated the postulated common understanding and thus led

to the achievement of EO3. In the course of the game, it became clear to the TA that cooperation strategies offer a very valuable and successful way in such threat scenarios.

6. SUBJECT AREA ENCLOSURES

6.1. General comments by the OCE

The wargame RERE 20 proved to be a suitable instrument for achieving the exercise and training objectives as stated in Chapter 3. The observation and **Lessons Identified** are summarised in this final exercise report.

Among the most prominent Lessons Identified was that the capacity to rapidly set up a multi-agency task force, a “Whole-of-Government Approach” as a response to a complex emergency is of paramount importance. A traditional, stovepipe-like approach is not appropriate for managing a complex crisis.

In overall, all wargame objectives have been met. The 3-day exercise was valuable to all participating nations and allowed fail-safe and especially safe to fail practice and thereby the enhancement of planning, communications and decision-making in a credible and relevant scenario.

The combination of military, hybrid and civil expertise in the core planning team has been a benefit for planning and the execution of the wargame.

Amongst all teams, the capacities and procedures of EU and NATO cooperation mechanisms are now better known, and this will increase preparedness and enables faster responses.

The wargame allowed the comparison and evaluation of national crisis management strategies and enhanced the exchange of experiences and strategies among participants on how to deal with the current COVID-19 pandemic (focus on civ-mil, health care and civil protection).

Overall, the more diverse teams (background, experience, gender) generated better / more creative solutions.

The players’ strategies changed throughout the game from “dealing with the current problem and neglecting future effects” towards a more forward-looking strategy by developing solutions for the future. A lot of participants, civil as well as military, were less familiar with EU or NATO procedures and possibilities for collaborative support at the beginning of the exercise, but showed a good understanding at the end of the war game.

Education and awareness of what constitutes a hybrid threat was a crucial factor in the wargame and will also be essential in future wargaming events.

It became clear that the mechanisms and procedures tried, trained and tested during the wargame can be used as a template for other crises and help to improve the efficiency of medical support.

6.2. Major conclusions and recommendations of the OCE

6.2.1. Train to support the fight against the virus

One of the recommendations heard most from participants was that regular training and wargaming should be held with member states on EU level in order to train and improve inter-sectoral crisis management and raise awareness of the range of mechanisms in place across the different sectors to deal with threats, including hybrid ones. Such training and wargaming would raise awareness of hybrid threats and promote an understanding of how they differ from other threats. It was also suggested to share best practice in preparedness and response from the different sectors in these events.

RESILIENT RESPONSE 2020 provided an opportunity for the participants from across the public health, the civil protection and security sectors to come together and engage in a pandemic scenario additionally to being challenged by hybrid threats. Whilst the wargame demonstrated that, in general, there is a good understanding of the roles and responsibilities during such an incident and a given level of awareness of systems and mechanisms were available, the wargame also highlighted that further coordinative and cooperative work is required in member states at EU levels to ensure interoperability between the various sectors. The wargame contributed towards improving the civil-military interface and medical resilience. It has been stressed that a regular use of wargaming is highly recommended in order to promote operational thinking and improve operational knowledge – understanding creates ability.

As stated in some of the comments/requests of the nations, MMCC/EMC is planning to organise a “RESILIENT RESPONSE” exercise –every three years – with a relevant topical and pandemic theme with hybrid threats on a regular basis in cooperation with other stakeholders in Europe.

6.2.2. The medical command and control capability

The focus is on sharing information with other countries, and in terms of planning for future crises, NATO and EU involvement is key to managing such situations. MMCC/EMC could be such a hub. In the future we develop and establish a regular exercise cycle, offering a range of adaptable medical wargames, listed in NATO’s MTEP as effort to synchronize with NATO’s SAGE and EU-exercise-planning.

7. OBSERVATIONS, EVALUATION AND LESSONS IDENTIFIED

7.1. The evaluation methodology

The RERE 20 evaluation methodology provided evaluation input through three channels:

1. Daily verbal AAR at the end of the wargame - providing the participants with a possibility to reflect and discuss the wargame directly with other teams. The Exercise organizers' observations from these AAR's were collected by the Evaluation team;
2. Questionnaires at the end of each game turn - capturing the participants observations on a pre-formatted form; over the three days 45 Questionnaires were returned;
3. First Impression Reports (FIR) - at the end of the three days, a FIR provided the opportunity to reflect on the exercise in a broader sense. A total of 15 First Impression Reports were returned.

7.2. Evaluation outcomes

The analysis of the collected information leads to the following conclusions:

1. All Exercise Objectives have been achieved, this was due to the very thorough preparation and organisation.
2. Although the purpose of the exercise RERE 20 is not to nominate a winning team, in hindsight it can be stated that the more diverse/mixed teams (background, experience, gender) created better and more creative solutions to battle the problems that the exercise provided to the participating teams.
3. The participants spoke of high quality and much appreciated the Wargame RERE 20. Issues stated in the various feedback forms and discussions were:
 - a. The metrics of the wargame that regulated the outcome for Economy, Healthcare and Society at the end of each turn were a source of minor issues for most of the participants. Some 70% would have liked a better or more transparent feedback loop from the effects of their played actions, including wildcards, on the different fields Economy, Healthcare and Social.
 - b. To the surprise of the exercise organisers, some 68% of participants were not familiar with the EU Response capabilities and procedures whereas most participants afterwards identified the collaborative effect with partner nations under an EU umbrella as the primary driver for success.
 - c. Some 48% of participants commented minor issues reflecting the unfamiliarity of wargaming especially the hybrid concept of RERE 20 whereby the majority of players participated in a virtual mode.
 - d. 43% of participants stated that education and awareness of what constitutes a hybrid threat was crucial to the wargame and will also be essential in future wargaming events.

4. Overall, the participating nations appreciated the three-day exercise and stated that it was a valuable activity that allowed a fail-safe practice and enhancement of planning, communications and decision making in a credible and relevant scenario. The combination of military, hybrid and civil expertise in the Core Planning Team has been a benefit for planning and the execution of the wargame, especially for the staff normally working in a medical environment that usually is not exposed to these fields.
5. To use the venue of RERE 20 for the integration of other civilian and military stakeholders of EU and NATO by the MMCC/EMC and the Hybrid CoE was highly appreciated by all participants. By doing this, the capacities and the procedures for EU and NATO cooperation mechanisms and the possibilities for EU or NATO collaborative support options are now better known and understood. This will increase preparedness and makes quicker response possible in future events.
6. The participating nations appreciated the possibility to compare and evaluate their national crisis management strategies with those of other nations. The exercise allowed for the exchange of experiences and strategies to deal with the current COVID-19 pandemic (focus on civ-mil, health care and civil protection).
7. The participants highly appreciated that during the 3-day exercise they were forced to change their strategy from reactively dealing with the current problem meanwhile neglecting future effects to a forward looking pro-active strategy development to think through possible future issues and solutions to achieve.
8. The wargame RERE 20 again showed the requirement for refining the existing medical reporting systems and concepts.
9. The M3-EPS is a concept that provides guidance for stockpiling efforts and define possible surge capabilities and capacity. Based on the experience of COVID-19 pandemic second and possible third wave, the 7 modules should be analysed with respective SMEs to integrate the concept into STANAGS, capability codes or stockpiling initiatives.

7.3. Lessons learned & Identified improvement

During RERE 20, some improvements were identified and either integrated or noted down for a next iteration of a "RESILIENT" series exercise.

Two of the noted down improvements are:

1. Feedback loop from Adjudication. Participants would like to have a response on decisions made by the Adjudication team on the effect of wildcards played by them.
2. Preparatory briefings and/or pre-reading packages for participants on EU and NATO response structures and procedures.

The OVERVIEW EVALUATION TOPICS are listed in ANNEX B.