Wifi

Network: EC Guest
User I.D: guest_echo@echo
Password: guest_echo
9 November

8:30-9:00 | Coffee
9:00-9:45 | Welcome and Introductions
9:45-10:15 | Recap from London
10:15-10:45 | Coffee Break
10:45-12:15 | Lessons Learned – Iraq and Syria
               Discussion – Complex Emergencies and Access
12:15-13:15 | Lunch Break
13:15-14:15 | Delivering in a Moving World and
               Strengthening Cross-Sector Partnerships
14:15-14:35 | Copernicus
14:35-15:00 | Coffee Break
15:00-15:45 | Update on Logistics Cluster Strategy
15:45-17:30 | Working Groups Preparation Sessions
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Coffee</td>
</tr>
<tr>
<td>9:00-10:30</td>
<td>Working Group- Governance</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:00-12:30</td>
<td>Working Groups- Preparedness and Budget</td>
</tr>
<tr>
<td></td>
<td>Strategy</td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>13:30-14:15</td>
<td>ERCC / Sessions (ESUPS, C&amp;M)</td>
</tr>
<tr>
<td>14:15-15:00</td>
<td>ERCC / KPIs Session</td>
</tr>
<tr>
<td>15:00-15:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>15:30-16:15</td>
<td>Working Group- Financial Demystification</td>
</tr>
<tr>
<td>16:15-17:00</td>
<td>Parking Lot Discussions</td>
</tr>
</tbody>
</table>
11 November

8:30-9:00 | Coffee
9:00-10:30 | Operational update- Ethiopia/Haiti
            Government Led Emergency Response
10:30-11:00 | Coffee Break
11:00-12:00 | Parking Lot Discussion and Loose Ends
12:00-13:00 | Wrap Up
12:30-13:30 | Lunch Break
13:30-14:00 | Closing Remarks
Welcome & Introductions
ICE BREAKER EXERCISE

1) What is the most surprising job that you had before working in humanitarian logistics?

2) What is the most significant factor, that your organization controls, that is fueling its logistics success?

3) Seeing how good it is... how can we implement the cluster approach in our own personal lives?

4) Which famous person would you choose as a Logistics Cluster spokesperson, and why?

5) What was the worst logistics nightmare that you had to deal with?

6) What is the most important thing for us to achieve in this global meeting?
Recap from London Meeting
Post London Global Meeting Survey Results

**Organisations**
- Private company: 4%
- Independent: 4%
- International Organisations: 10%
- Government: 16%
- United Nations Agencies: 17%
- Non-Governmental Organisation: 49%

**Participant Facts**
- Reasons for attending:
  - 53% Learn about new topics
  - 41% Know more about the Logistics Cluster
  - 35% Give feedback
  - 22% To present a project
  - 78% Exchange ideas
  - 78% Make new connections
  - 63% Influence the future of the Logistics Cluster
  - 53% Collect new information
  - 76% Represent my organisation

**Content**
- Rating the organisation of the event:
  - 60% Excellent
  - 38% Satisfactory

**Fulfilled reason for attending**
- Completely: 67%
- Partially: 33%

**51** Number of respondents

**100%** Sufficient opportunities to interact and network with other attendees

**Best rated content**
- Pacific Region Preparedness
Global Logistics Cluster Meeting
London, June 2016

Topics

• Preparedness
• 3-Year Strategy
• Lessons Learned, WHS, Private sector engagement, ESUPS, Medical Logistics, WFP as a lead agency, Financial reporting, Humanitarian Fleet Management

Participation

• 66 participants over three days
• 44 organisations represented
Post London Global Meeting Survey Results

IDEAS FOR THE NEXT MEETING

- Make it more operational, how actors engage at the country level where the cluster is not present.
- Key Performance Indicators (KPIs)
- Market Analysis/Assessments
- Preparedness – updates + action plans
- Supply Chain Management – Best Practices and Solutions
  
  Give time for working groups to share their findings and update on progress
- Shared services, resources, response models and tools.
Working Groups

• Preparedness
• Governance
• Financial de-mystification
COFFEE BREAK

Session will re-start at 10:45
LESSONS LEARNED – IRAQ AND SYRIA

THE CHALLENGE OF COMPLEX EMERGENCIES
Your voice counts!

Tell us, what were your identified problems in the operations in Syria and Iraq? What do you think the Logistics Cluster Lessons Learned results look like?
<table>
<thead>
<tr>
<th>KEY RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
</tr>
<tr>
<td>ii.</td>
</tr>
<tr>
<td>iii.</td>
</tr>
<tr>
<td>iv.</td>
</tr>
<tr>
<td>v.</td>
</tr>
</tbody>
</table>
1. Coordination

1.1 Focus more on coordination in Turkey and Jordan.
1.2 Widen the portfolio to cover the entire supply chain in Turkey and Jordan.
1.3 Keep strong relationship with WFP, OCHA and other coordinating bodies.
1.4 For Logistics Cluster Coordination Meetings, ensure a trustful, friendly environment and ensure sufficient attendance by key stakeholders.
2. Information Management &
3. Common Logistics Services

**2.1** Increase information sharing by strengthening relationships with partners in general and with local NGOs in specific.

**2.2** Consider alternative communication channels such as chat groups for real-time information sharing.

**3.1** Conduct more logistics trainings for partners to build their capacity and strengthen relationships.

**3.2** Develop contingency plans for the transshipment hubs in Turkey and Jordan.

**3.3** Promote the use of RITA among partners to trace their cargo. Conduct regular training sessions.
4.1 Develop a global Logistics Cluster M&E framework and strategy to guide Logistics Cluster teams in monitoring operations and informing decision-making processes.

4.2 Roll out RITA 2 in Syria and provide a training to the entire Cluster team.

4.3 Deploy a RITA expert from headquarters to support the team for a period of one month.
Survey Results

1. Are you familiar with the Logistics Cluster strategy for Iraq as outlined in the Humanitarian Response Plan (HRP) 2015 and in the Logistics Cluster Concept of Operations?
   - Yes: 60.0%
   - No: 40.0%
   - I don't know: 14.3%

2. Have you been able to address this challenge with the assistance of the Logistics Cluster?
   - Yes: 60.0%
   - No: 23.3%
   - I don't know: 16.7%

3. Has the Logistics Cluster involved your organisation in any discussions or reviews of expected logistic needs (feeding into the Logistics Cluster Concept of Operations)?
   - Yes: 60.0%
   - No: 14.3%
   - I don't know: 25.7%
### Key Recommendations

<table>
<thead>
<tr>
<th>i.</th>
<th>Foster a Participatory Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii.</td>
<td>Establish a Proactive Information Management Function.</td>
</tr>
<tr>
<td>iii.</td>
<td>Keep up the responsiveness and flexibility of the Logistics Cluster Team in all three countries.</td>
</tr>
<tr>
<td>iv.</td>
<td>Assert the Logistics Cluster Competitive Advantage</td>
</tr>
<tr>
<td>v.</td>
<td>Strengthen Leadership</td>
</tr>
</tbody>
</table>
1.1. Foster stakeholders engagement
1.2. Strengthen leadership on logistics
1.3. Raise awareness of the Logistics Cluster mandate and services

2.1. Improve needs assessment
2.2. Adapt IM portfolio according to needs
2.3. Understand the operating environment

3.1. Plan service facilitation based on confirmed and recurrent needs
3.2. Reaffirm the Logistics Cluster competitive advantage
4. Global Logistics Cluster

4.1. Adequately prepare staff for their functions and posting
4.2. Reinforce HQ support
4.3. Establish country-specific KPIs for HQ staff
4.4. A global M&E framework and strategy
Group work

• Do we need to implement those recommendations?
• If yes, how should we do?
• What is your role as Global Logistics Cluster Partner?
Humanitarian Access
What is humanitarian access?

Humanitarian actors ability to reach people affected by crisis

AND

Affected people’s ability to access humanitarian goods and services
Humanitarian Access

- **Security Constraints**
  - Hostilities have prevented humanitarians from delivering assistance to parts of central Yemen
  - Attacks on civilians and humanitarians in northeast Nigeria have required the use of armored vehicles and armed escorts

- **Political Constraints**
  - Humanitarians have been denied access through checkpoints to besieged Aleppo
  - In eastern Ukraine, opposition groups have demanded local accreditation in order to operate
  - Counter-terrorism measure have limited the availability of partners in Gaza
Key questions

• Who has which function in access strategy development and negotiations?
• Who should be involved?
• Should the cluster be involved?
• What is our role?

Please discuss in your group and try to agree
LUNCH BREAK

Session will re-start at 13:15
WHS 2016 Humanitarian Supply Chain Paper
Recap and Follow-up

Brussels
November 09th, 2016
The Paper has been kindly supported by
Meet the increasing scale, cost and complexity

I. Strengthening Local Response

II. The Marriage of Cash and In-Kind

III. Access to beneficiaries during complex emergencies

IV. Engagement of the private sector in humanitarian operations

V. Coordination, Collaboration and Shared Services

Recommendations and Findings
The Paper got promoted and distributed at

- WHS Istanbul, May 2016
- Logistics Cluster Website
- Translation to French and German (with support from Welthungerhilfe)
- World Risk Report, July 2016
- BVL Congress Berlin, October 2016
- Direct impact on various capacity building projects
WHS 2016 Assumptions
1) Humanitarian Supply Chain represents 60-80% of expenditures (Van Wassenhove, 2006)
2) “Every dollar spent reducing people’s vulnerability to disaster saves around 7 dollars in economic losses” (UNDP, 2012)

Objectives
Using ACF data:
1) Check the assumptions
2) Build a model to set an appropriate preparedness strategy
3) Find opportunities for investments and estimate the ROI
“Humanitarian Supply Chain represents 60-80% of costs during disaster response” is true for ACF

Results

- Validate 60-80% assumptions with other organisations
- Build a model for ACF to test “Every dollar spent reducing people’s vulnerability to disaster saves around 7 dollars in economic losses”
- Share the model with interested partners

Next steps
Cash Programs

Objective WV
Improve ability to deliver cash by creating guidance localized to Philippines

Summary
Focus on beneficiaries
1) Coordination of the different stakeholders
2) Community risk assessment
3) Participatory beneficiary selection
4) Feedback mechanism from the community

Objective FAO
Understand local market’s structure and stability (market exclusion of smallholders, unfair competition on the retail end), link consumers with small farmers, improve effectiveness and efficiency of the vouchers scheme

Summary
Restructuring the existing informal markets – Government regulations
**Complex Emergencies: Nepal multi-layered response strategy**

<table>
<thead>
<tr>
<th>Layer</th>
<th>1 to 5</th>
<th>6 to 10</th>
<th>11 to 15</th>
<th>16 to 20</th>
<th>21 to 25</th>
<th>26 to 30</th>
<th>31 to 35</th>
<th>36 to 40</th>
<th>41 to 45</th>
<th>46 to 50</th>
<th>&gt; 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer I</td>
<td>PP stocks from centralised (or decentralised) WH in KTM.</td>
<td>Mainly 4 to 6 MT trucks</td>
<td>Trucks will go to pre-defined humanitarian staging areas (HSAs)</td>
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<tr>
<td>Layer II</td>
<td>PP stocks from Birgunj (maybe Nepalgunj) - lead time depends on infrastructure</td>
<td>Mainly 4 to 8 MT trucks</td>
<td>Begin Airlifts or Airdrop (IL 76/ATR 72/Mi8/171/Mi26) to KTM or Simara airport or HSAs</td>
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</tr>
<tr>
<td>Layer III</td>
<td>Deploy logs teams, activate virtual stocks &amp; FWAs from New Delhi &amp; Kolkata; Govt and Cluster coordination</td>
<td>Supplies will be continuously procured from New Delhi &amp; Kolkata</td>
<td></td>
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<tr>
<td>Layer IV</td>
<td>Mainly 12 to 15 MT trucks</td>
<td>Begin Airlifts (IL 76/ATR 72/Mi8/171/Mi26) to KTM or Simara airports or HSAs</td>
<td>Mainly 12 to 15 MT truck</td>
<td>Airlifts would be kept to a minimal depending on situation</td>
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<tr>
<td>Layer V</td>
<td>Activate &amp; begin to facilitate GiK from International sources via Sea (Kolkata) or Air (New Delhi, Kolkata, Lucknow or Patna)</td>
<td>International supplies from sea via Kolkata ports (Haldia or Daimond Harbour)</td>
<td>Lucknow and Patna can facilitate supplies &amp; personnel via Air</td>
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</tr>
</tbody>
</table>
Complex Emergencies: WHO Supply Chain Optimization – Syria Response

Original Objective

Analyze and Optimize the Supply Chain setup of WHO’s Humanitarian Response in Syria from the perspective of the Global Service Centre (GSC)

Summary

- Review Supply Chain setup
- Identify bottlenecks
- Explore opportunities to streamline business processes
- Increase visibility
- Reduce lead times and costs

Diagram:

- MoH Syria
- WHO CO Syria
- WHO EMRO Egypt
- WHO GSC Malaysia
- International Supplier
- Forwarder

Flow:
- Request from MoH Syria
- Flow to WHO CO Syria
- Flow to WHO EMRO Egypt
- Flow to WHO GSC Malaysia
Bullwhip Effect: HEB Simulation

- Understand humanitarian operations as an system of interdependent material and information flows
- Elaborate why information is often poorly or wrongly shared in supply chains
- Learn how to overcome common supply chain inefficiencies
Plenary discussion
Cost breakdown

**Additional slides**

**Central African Republic**
This methodology was chosen to incorporate qualitative factors in our analysis.
Meeting the increasing scale, cost and complexity

I. Strengthening Local Response
II. The Marriage of Cash and In-Kind
III. Access to beneficiaries during complex emergencies
IV. Engagement of the private sector in humanitarian operations
V. Coordination, Collaboration and Shared Services

Major findings

- Invest in supply chain preparedness in order to save money and time in future response. These investments need to be a much larger proportion of humanitarian and development budgets.
- Provide support to local supply chains during both the preparedness and response phases when utilizing cash modalities.
- Maintain in-kind supply chains in case humanitarian organizations must quickly transition to providing relief items to beneficiaries.
- Work closely with governments prior to emergencies to ensure that humanitarian supply chains are respected as neutral, supply corridors are opened and protected, and ultimately, that conflict cease.

- Local humanitarian networks should be strengthened and complement international intervention.
- Humanitarian response should be “as local as possible and as international as necessary.”
- Align on preparedness scenarios and collaborate on information management.
- Establish long-term collaborations with the private sector for emergency preparedness and response activities alongside national disaster management offices and other stakeholders.
- Humanitarian response should be “as local as possible and as international as necessary.”
- Align on preparedness scenarios and collaborate on information management.
- Establish long-term collaborations with the private sector for emergency preparedness and response activities alongside national disaster management offices and other stakeholders.
Complex Emergencies: Ebola Response

Original Objective
To study the effect of cargo consolidation on pandemic response supply chains

How?
MSc student as intern, writing also his master thesis

Research Questions
1) What is the needed transport capacity over time?
2) What should the share of transport modalities (air or sea) be?
3) Is consolidation beneficial? If yes, where and to what extent?
4) Which steps of the supply chain have the greatest impact on the overall performance of the system? (Sensitivity Analysis)

INPUT
- Demand (Opals)
- Time Frame
- Information on possible consolidation hub (e.g. Capacity, Location, Turnover)
- (Lead Time, Distance of participating Agencies/NGOs)
- Info about affected area/point of entry (e.g. location, handling capacity, pick up times)
- Info about possible transport modalities (sea, air, (land))

MODEL

OUTPUT
- Consolidation Hub (Y/N)
- Location of Hub
- Transport Modality
- Transport Quantities
- Transport Frequency
- Lead times (Logistics and Orga)
- Crucial Supply Chain Links
Outline

★ Copernicus **Space** programme – what is it?

★ The 6 **services** from Copernicus

★ The **Emergency service**
Earth Observation programme providing relevant information to EU policies in the fields of environment, disaster management and security (former GMES)

Copernicus is a flagship of the European Space Policy
- Copernicus Space Programme of the European Space Agency (ESA)
- Copernicus Regulation + budget
Objectives

"The Union Earth observation and monitoring programme"

Monitor the environment

- Protect people and assets
- Increase general knowledge on the state of the Planet
- Improve environmental policy effectiveness
- Facilitate adaptation to climate change
- Help managing emergency and security related situations

Foster downstream applications in a number of fields
Activities now transfer from research to operations

- R & D
- Preparatory actions
- GMES
- Dedicated Sentinels
  - Copernicus operational programme
  - Operational services
  - € 1.3 Bn
  - € 4.3 Bn

Timeline:
- 2008
- 2011
- 2014
- 2020
Copernicus current status

Seven Milestones reached:

- Programme Regulation adopted
- Budget of 4.3 Bn EUR for 2014-2020
- Full, free and open access to data
- Successful launch of Sentinels 1A, 2A & 3A
- First images used
- Funds delegated to ESA/EUMETSAT and service providers
- Four services are operational delivering 24h/7d
6 services use Earth Observation data to deliver ...

...added-value products

Sentinels

Contributing missions

in-situ
Each Sentinel is technically different to meet the needs of the 6 services

<table>
<thead>
<tr>
<th>Sentinel 1 – radar imaging</th>
<th>Sentinel 2 – Optical imaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>All weather, day/night applications</td>
<td>Land applications: urban, forest, agriculture,..</td>
</tr>
</tbody>
</table>

| Sentinel 3+6 – Ocean and global land monitoring, high precision ocean altimetry |
| Sentinel 4+5 – Atmosphere composition monitoring, from a geostationary (-4) and a polar orbit (-5) |

• By end 2020: 8 Sentinel satellites in orbit, over 24 Sentinels by 2040, providing most of the data needed by Copernicus services

• Where Sentinels are not yet operational, Programme buys Earth Observation data from other satellite data providers (contributing missions)
Launch from Europe’s Spaceport in Kourou, French Guiana, on 3 April 2014
Full, free and open Access for everybody

Copernicus Space Component Data Access Portal

sentinels.copernicus.eu

Copernicus Services Access
Scientific / Other Access Hub
Collaborative Access Hub
International Agreements Access Hub

Credit: ESA
Monitoring of earth systems

- Land
- Marine
- Atmosphere

- Security
- Emergency
- Climate Change
Helping victims when disaster strikes
Emergency Management Service (EMS)

- Fully operational since April 2012
- 24/7 addressing natural and man-made disasters throughout the world
- Provides disaster management information based on space data combined with other information
- Focal point for users is the EU Emergency Response Coordination Centre at DG ECHO (ERCC)
- Coordination by DG ECHO, DG GROW, DG JRC
- Two components: Mapping and Early Warning System (EWS)
- For some events EMS Mapping is supported by EWS
- Standard delivery: raster and vector maps
Copernicus EMS Mapping - Users

EC Coordination

Level 1: Authorised Users (AU)
- National Focal Points
- EC services
- EEAS External service

Level 2: Associated Users (ASCU)
- Regional/public users
- UN agencies, World Bank, NGOs
- EU Delegations

Level 3: General Public User (GPU)
- Public, media, other users

Emergency Response and Coordination Centre (at DG ECHO; DG GROW, DG JRC)

trigger inform
The Emergency Service

RISK AND RECOVERY MAPPING
- On demand
- Tailored to user needs
- Weeks-months

REFERENCE MAPS
- PRE-DISASTER SITUATION MAPS
- POST-DISASTER SITUATION MAPS

VALIDATION

EARLY WARNING
- Floods: EFAS
- Forest Fires: EFFIS

CONTINUOUS ALERTS

RAPID MAPPING
- On demand
- Standardised
- Hours-days

REFERENCE MAPS
- DELINEATION MAPS
- GRADING MAPS

VALIDATION
Emergency Management Service (EMS) has **two components:**

- **Early Warning**
  - EFAS (floods)
  - EFFIS (forest fires)

- **Mapping**
  - Rapid Mapping
  - Risk & Recovery
European Flood Awareness System (EFAS), the early warning system for floods

★ EFAS fully operational: under development at JRC since 2002 and fully operational since September 2012 under the Copernicus Emergency Management Service.

★ Objectives of EFAS:

✔ Provide complementary flood forecasting information to national services
✔ Provide European scale overview to the ERCC/ECHO
✔ Pre-alerting Copernicus EMS Mapping

EFAS partners: national/regional hydrometeorological authorities; currently more than 50 partners (EU & non-EU)
The European Flood Awareness System (EFAS)

• **Need:** lack of coherent flood information and coordination in Europe for trans-national flood events, e.g. during Elbe and Danube floods in 2002

• **Aim:** EFAS provides added value, trans-national flood early warning information to EC civil protection and national authorities.

• **JRC:** started development in 2003 - since September 2012 fully operational as part of the Copernicus Emergency Management Service

**What:**

- Flood early warning info for up to 10 days
- Probabilistic flood forecasts (different NWP models)
- River basin wide, European scale
- Flash flood specific forecasts
- Web interface: www.efas.eu
- Web services: WMS-T and SOS
European Forest Fire Information System

• The scope of EFFIS is to:
  – Provide EU level assessments during both pre-fire and post-fire phases
  – Complement national fire information systems
  – Support forest fire fighting operations

• Users
  – EC Services, European Parliament, national/regional forest fires and civil protection services of EU and non-EU countries, and EU citizens
  – FAO, United Nations Economic Commission for Europe, FAO Silva Mediterranea
Emergency Management Service (EMS) has **TWO components:**

- **Early Warning**
  - EFAS (floods)
  - EFFIS (forest fires)

- **Mapping**
  - Rapid Mapping
  - Risk & Recovery
Helping victims when disaster strikes

http://www.emergency.copernicus.eu

Main geographic areas of activations during the 42 months of operational activities

Disaster Type

- Earthquake: 32%
- Fire: 10%
- Flood: 7%
- Industrial Accident: 3%
- Other: 7%
- Wind Storm: 3%

Nb of activations/disaster type
During the 42 months of operations (total is 137)
Schedule update

★ Rapid Mapping
★ 17 activations during 1 Jan – 10 June 2016
★ Floods (7)
★ Earthquakes (2)
★ Wind Storm (1)
★ Other (7)

Since start of operations
166 activations

Disaster type (nb)
- Flood, 69
- Earthquake, 8
- Fire, 16
- Other, 55
- Wind storm, 13
- Industrial accident, 5

Triggering entity (nb)
- National Focal Point, 105
- EC Services, 60
- EEAS, 1

Disaster location
56%
Events in 2016

Earthquake, Central Italy

Tropical Cyclone, Haiti

Flood Risk Assessment, Bulgaria

Forest Fire, Sardinia, Italy
Emergency Management service

Providing support to emergency response services

Situation maps, reference information

Flood and forest fire risk forecasts
What is possible with Rapid Mapping?

- On-demand, **fast provision** (hours-days) of geo-spatial information in support to emergency management activities
- Provide an overview of the reference situation on the ground
  - Location of assets (settlements, transportation, land use, land cover, etc.)
  - Terrain, hydrology
- Delineate the disaster’s extent (e.g. flooded or burnt area, lava flow extent)
- Locate damages to buildings, transportation infrastructure, etc. (to be used for quantitative estimates)
**Copernicus EMS Rapid Mapping**

- 24/7 service
- Standardised products (map types)
- Two production modes (service levels – SL – 1 or 5 days*)

<table>
<thead>
<tr>
<th>MAP TYPE</th>
<th>CONTENT</th>
<th>DELIVERY TIME*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>Detailed status of the territory &amp; assets prior to the crisis</td>
<td>9h 5 days</td>
</tr>
<tr>
<td></td>
<td>e.g. Topographic features &amp; specific information</td>
<td></td>
</tr>
<tr>
<td>Delineation</td>
<td>Assessment of the event’s extent</td>
<td>12h 5 days</td>
</tr>
<tr>
<td></td>
<td>e.g. delineation of burnt area, delineation of flooded area, earthquake impact area; estimations on the exposed or affected population and assets</td>
<td></td>
</tr>
<tr>
<td>Grading</td>
<td>Assessment of the damage grade &amp; its spatial distribution</td>
<td>12h 5 days</td>
</tr>
<tr>
<td></td>
<td>e.g. for any disaster event, location of destroyed/damaged buildings and assets, and damage grading (possibly-moderately-highly affected-destroyed)</td>
<td></td>
</tr>
</tbody>
</table>

* after satellite image delivery
Flood related activations globally: Myanmar, Malawi, India, Bangladesh, Cambodia, Mozambique, Cameroon, Niger
Risk & Recovery Mapping

Which contribution can Risk & Recovery mapping make?

Provides on-demand geospatial information supporting emergency management activities not related to the immediate response. It addresses *prevention, preparedness, disaster risk reduction* and supports the *recovery* phase.

Product delivery phase: 35 days (15 + 20)

<table>
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<tr>
<th>MAP TYPE</th>
<th>CONTENT</th>
<th>DELIV. TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFERENCE</td>
<td>Detailed status of the territory and assets.</td>
<td>20d(#)</td>
</tr>
<tr>
<td></td>
<td>• E.g. Topographic features and specific information, e.g. land use</td>
<td></td>
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<tr>
<td></td>
<td>zoning plans, mitigation measures</td>
<td></td>
</tr>
<tr>
<td>PRE - DISASTER</td>
<td>Relevant info to help planning for contingencies on vulnerable areas</td>
<td>20d(#)</td>
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<td>• E.g. Hazard exposure to hazardous events; Vulnerability / resilience</td>
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<td></td>
<td>of settlements and buildings; Risk status for population and assets;</td>
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<tr>
<td></td>
<td>Evacuation plans; Forecasts; Alerts</td>
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<tr>
<td>POST - DISASTER</td>
<td>Relevant thematic information, beyond the immediate response phase</td>
<td>20d(#)</td>
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<td></td>
<td>• E.g. Hazard exposure to hazardous events; Vulnerability / resilience</td>
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<tr>
<td></td>
<td>of settlements and buildings; Risk status for population and assets;</td>
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<tr>
<td></td>
<td>Post disaster needs assessment; Recovery plans; Reconstruction /</td>
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<tr>
<td></td>
<td>rehabilitation monitoring; IDP monitoring (IDP camps, IDP movements).</td>
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</tr>
</tbody>
</table>

(#) working days after signature of a specific contract, which may require normally 15 days after the service request
## Risk and Recovery Mapping (RRM)

<table>
<thead>
<tr>
<th>EMSN018</th>
<th>Multiple natural hazard risk assessments – Azores Islands</th>
<th>Completed</th>
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</thead>
<tbody>
<tr>
<td>EMSN020</td>
<td>Multiple natural hazard risk assessments – Madeira Islands</td>
<td>Completed</td>
</tr>
<tr>
<td>EMSN019</td>
<td>Detailed mapping of major chemical industry for selected sites – Germany</td>
<td>Completed</td>
</tr>
<tr>
<td>EMSN021</td>
<td>Earthquake risk assessment for 3 areas – Austria</td>
<td>Completed</td>
</tr>
<tr>
<td>EMSN022</td>
<td>Bulgaria - Post-disaster analysis, damage assessment, recovery and rehabilitation planning and monitoring, flood risk assessment, disaster preparedness and response mechanisms</td>
<td>In production</td>
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<tr>
<td>EMSN023</td>
<td>Risk of rain, flood and heat extremes for the World Youth Day, Krakow 2016 - Poland</td>
<td>In Production</td>
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<tr>
<td>EMSN024</td>
<td>Nation wide asset mapping - Germany</td>
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<tr>
<td>EMSN025</td>
<td>Forest fire damage assessment - Greece</td>
<td>In production</td>
</tr>
<tr>
<td>EMSN026</td>
<td>Post Disaster assessment of toxic cloud dispersion - Spain</td>
<td>In production</td>
</tr>
<tr>
<td>EMSN027</td>
<td>Monitoring of drought mitigation measures - Somalia</td>
<td>Offers evaluated and ready for Service Provider selection</td>
</tr>
</tbody>
</table>

+ interesting RRM activation proposals from DE, BG, World Food Programme (WFP), International Organization for Migration (IOM) from the April 2016 call for expression of interest.
EMS Mapping

Timeline

EMS Rapid Mapping

Disaster

Activation of the service

Satellite tasking

Satellite image delivery

Some hours to 30h

≤12h*

Map delivery

Maps picked up by the MEDIA immediately after the event

* Production time in service level 1
New & Future Developments

• Integration of EWS into Rapid Mapping

• Use of data from social media for early alerts (in addition to open data)

• Building of a common platform among international mapping agencies in case of large disasters

• Use of airplanes and drones for image acquisition

• International framework agreements bilaterally with countries or with international organisations e.g. African Union, IWG-SEM, CEOS
The Copernicus Emergency Service


★ [http://www.emergency.copernicus.eu](http://www.emergency.copernicus.eu)
Thank you for your attention

Francoise.Villette@ec.europa.eu

emergency.copernicus.eu

FB: CopernicusEU
Twitter: @Copernicus EU
COFFEE BREAK

Session will re-start at 14:35
UPDATE ON LOGISTICS CLUSTER STRATEGY
3-Years Strategy

What is it?
Vulnerable communities globally are effectively served in crises by a prepared and locally driven humanitarian logistics system.

**THE LOGISTICS CLUSTER** enables global, regional and local actors to meet humanitarian needs BEFORE CRISSES we work with stakeholders in high risk countries and regions to strengthen local capacities IN CRISSES where local capacities have been exceeded, we provide leadership, coordination, information and operational services. GLOBALLY the Logistics Cluster is a community of organizations actively working to overcome logistics constraints, develop and share best practices and solutions.

**GOALS**

01 PREPARE
Strengthen response capacity of national and regional actors

02 NETWORK
Engage with actors at local levels
Advocate for humanitarian logistics issues

03 OPERATE
Provide crucial operational services and information

04 LEARN
Continuous learning
Identify gaps
Share best practices

**VALUES**

ACCOUNTABILITY

PARTNERSHIP

SUSTAINABILITY & RESILIENCE

PROFESSIONALISM & INDEPENDENCE
Current status on a global level
Strategy by pillar

4 stations
Move around
Concerns?
WORKING GROUPS
PREPARATION
SESSIONS
# WORKING GROUPS PREPARATION SESSIONS

<table>
<thead>
<tr>
<th>Preparedness</th>
<th>Financial De-Mystification</th>
<th>Governance</th>
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<tbody>
<tr>
<td>Theo</td>
<td>Thierry</td>
<td>Fabrice</td>
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<tr>
<td>Christian</td>
<td>Juan</td>
<td>Kavitha</td>
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<td>Frederick</td>
<td>Jorn</td>
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<td>Moeid</td>
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<td>Lionel</td>
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DINNER

Kindly hosted by

HELP LOGISTICS AG

Time: 19:30
Location: Kitchen 151
Chaussée de Wavre 145,
1050 Ixelles, Belgium
END OF DAY ONE