REPUBLIC OF TURKEY
MINISTRY OF FORESTRY AND WATER AFFAIRS
TURKISH STATE METEOROLOGICAL SERVICE

Operational Concept of the SEEFFG System

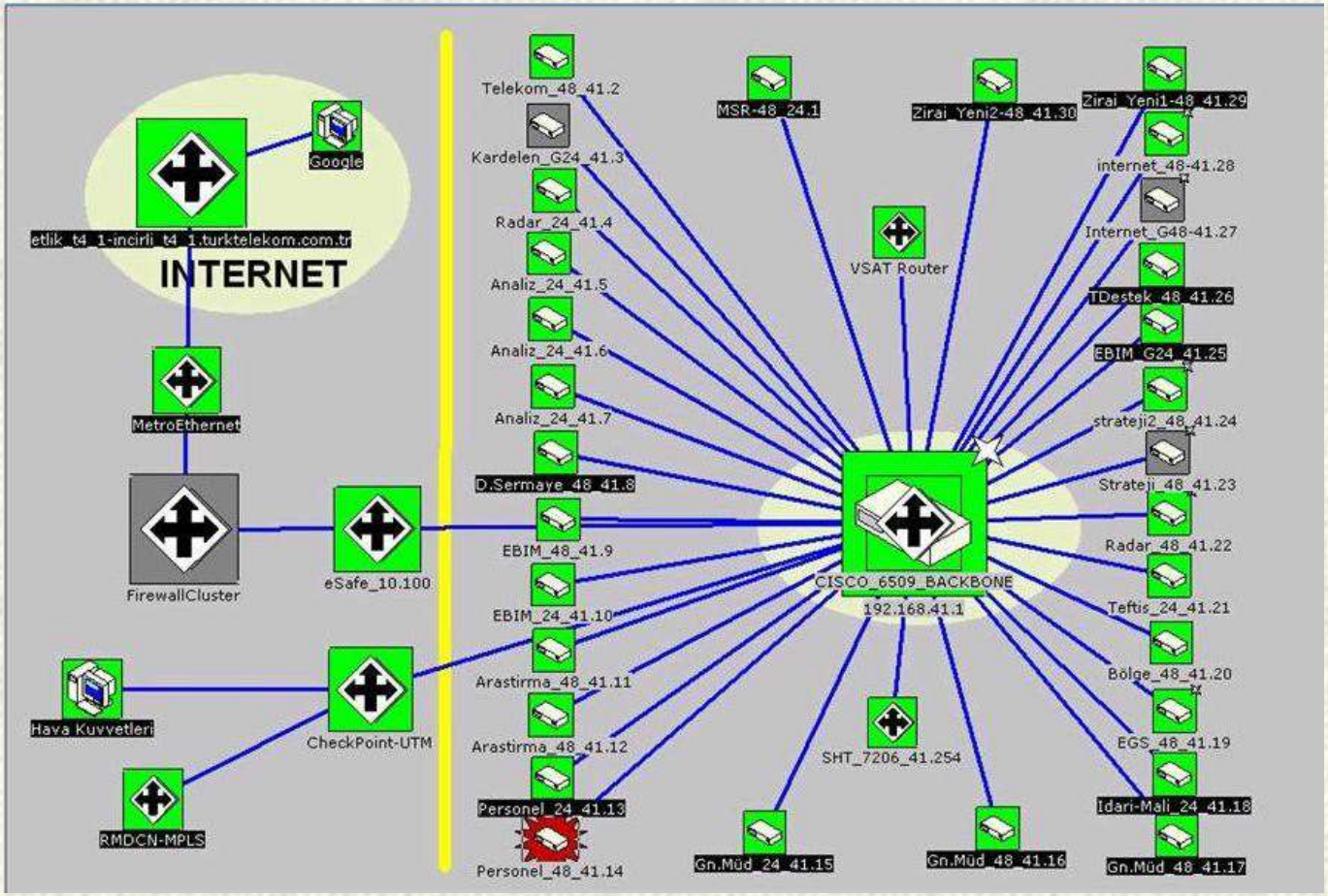
Emel Ünal
Hydrometeorologist

Turkish State Meteorological Service,
Research Department, Hydrometeorology Division

South East Europe Flash Flood Guidance (SEEFFG) System
2nd Steering Committee Meeting (SCM2)
26–28 September 2017, Podgorica, Montenegro

World Meteorological Organization (WMO) | Hydrologic Research Center (HRC) | National Oceanic and Atmospheric Administration (NOAA) | U.S. Agency for International Development (USAID)

Overview of the servers



TSMS Network includes:

- ✓ CISCO Backbone,
- ✓ 31 Edge Switch,
- ✓ 20 Servers, including BSMEFFGS and SEEFFGS servers

BSMEFFGS & SEEFFGS Server Configuration

Brand	HP Proliant DL380
CPU	Intel Xenon i7 E5-2620
Processor clock speed	2.0 GHz
CPU cores	6
Hard disk capacity	7.5 TB
RAM	32 GB (2x16GB Registered DIMMs, 2133 MHz)
Operating system	LINUX, Centos release 7
GPU	Matrox MGS G200EH graphic card support

BSMEFFGS and SEEFFGS servers have the same configurations.
Each system has 2 servers;

- Computation Server
- Dissemination Server

Computational Server

Computation server;
The computational core at the RC runs

- ✓ meso-scale meteorological models,
- ✓ high resolution hydrologic model for the region that produce various diagnostic indices, forecast of precipitation, soil water deficit and FF potential for small streams on the basis of global meteorological model forecasts, satellite estimates of precipitation with high resolution and short latency and real time operational rain gauge and surface weather station reports. (HRC Tech. Note 53)

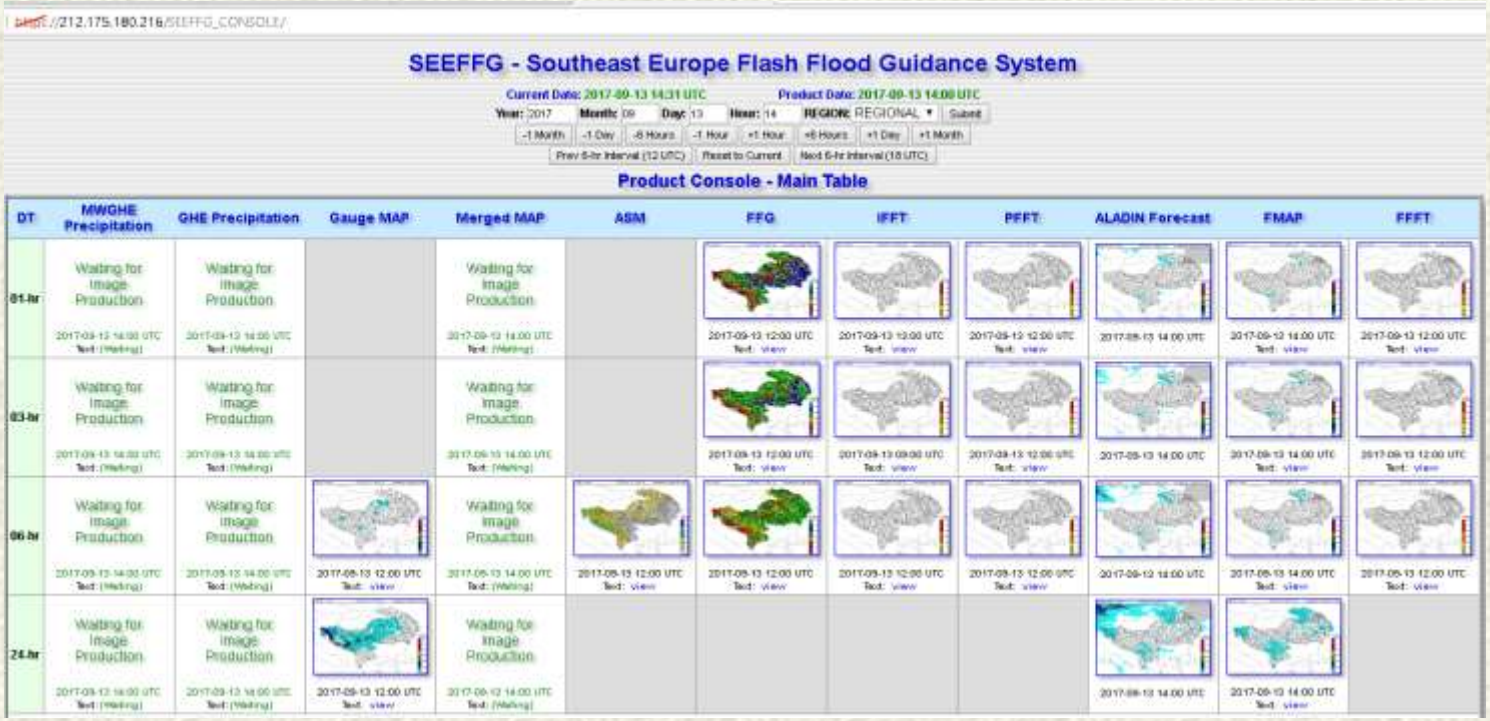
- ✓ To compute the FFG, it is necessary to estimate the soil water deficit for each of small basins and the storage in the channel network up to the bankfull flows.
- ✓ When these two storages are filled for a small basin under continuing rain, then there is high potential for FF development.(HRC Tech. Note 53)

Dissemination Server

Dissemination server;

- ✓ The FFGS is primarily responsible for all data acquisition, pre-processing, model processing. After the FFGS has completed these processes, the resulting products are disseminated.
- ✓ SEEFFG dissemination server allows additional post-processing to authorized users for not only real-time, but also previous historical products through a secure web interface.
- ✓ All authorized users can log in to dissemination server to access the SEEFFG products.

Access to SEEFFGS User Interface Console



SEEFFGS is now running on TSMS servers.

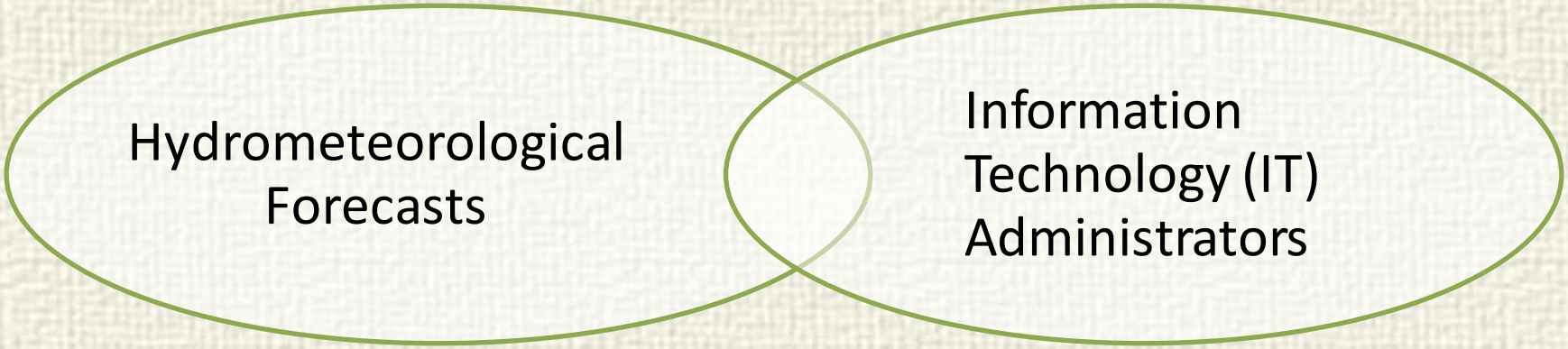
In order to access SEEFFGS user interface console, users enter the web address

https://212.175.180.216/SEEFFG_CONSOLE

https://212.175.180.216/SEEFFG_DASHBOARD

Operational System Maintenance (1)

OPERATIONAL SUSTAINABILITY



Running appropriately?

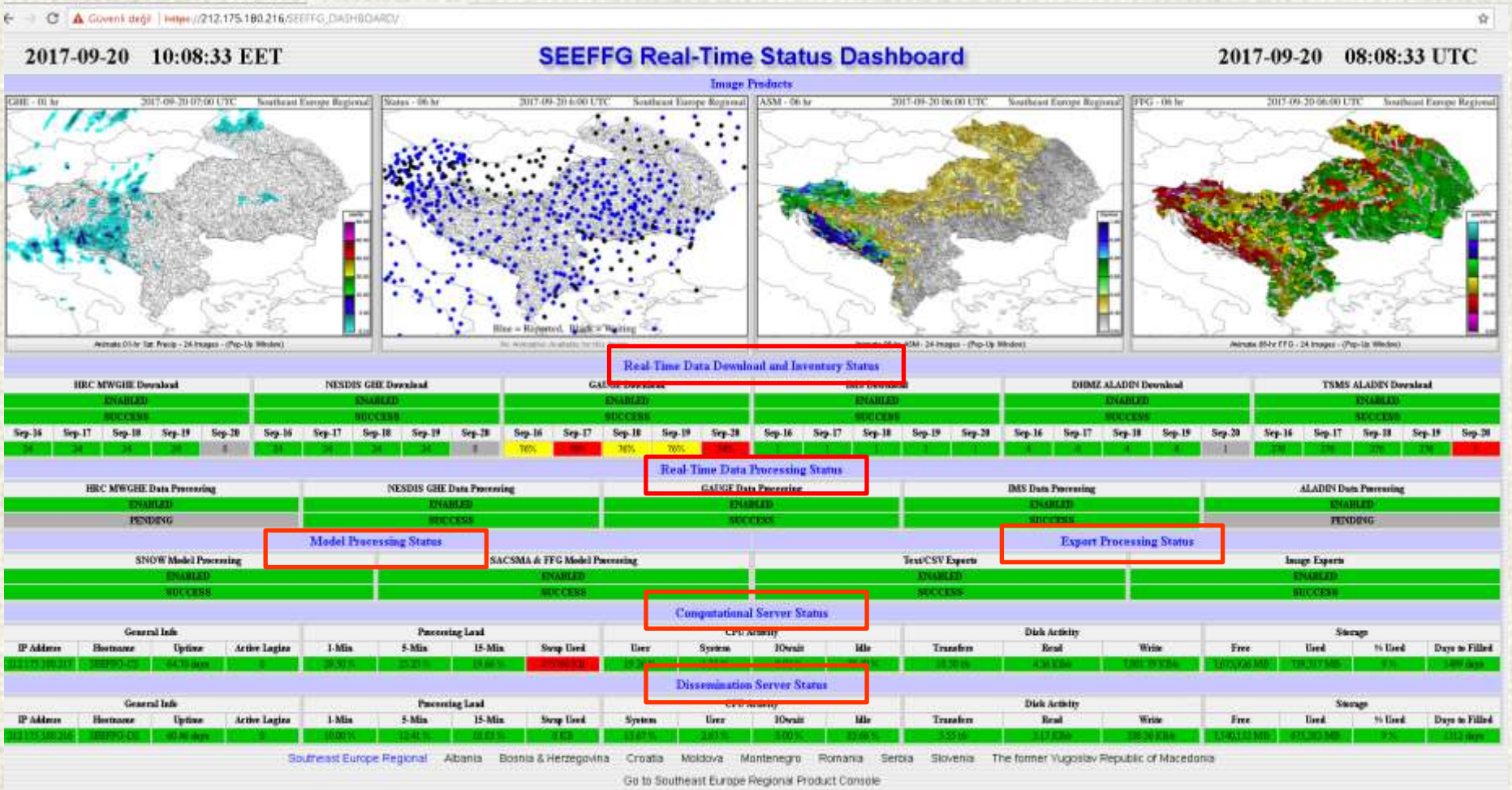
Intervention?

Problems?

SYSTEM REVIEW

Operational System Maintenance (2)

Operational System Maintenance (3)



Thank you

Presented by

Emel Ünal eunal@mgm.gov.tr

Contributed

Bahattin Aydın bahattinaydin@mgm.gov.tr
Ali İhsan Akbaş aiakbas@mgm.gov.tr
Seyfullah Çelik scelik@mgm.gov.tr
Ertan Turgu eturgu@mgm.gov.tr
Mehmet Aksoy mehmetaksoy@mgm.gov.tr
Özge Yılmaz ozgeyilmaz@mgm.gov.tr
Esin Oğuz esoguz@mgm.gov.tr