Alternative EPN Data Flow

EPN Coordination Group

Guidelines

- ***PROCEDURE FOR BECOMING AN EPN STATION***

❖ ... In addition to the Primary Data Center, each station should have a secondary or alternative data center (Local or Regional) where it can send its data in case of outages of the primary LDC/RDC. This alternate data flow procedure should be fully tested.....

Guidelines

- ***FOR EPN STATIONS & OPERATIONAL CENTRES***

❖ ...Each station should be assigned with an alternative DC (Local or Regional) where it can send its data in case of LDC/RDC outages. These alternate data flow procedures should be fully tested....

❖ ...Hourly files, which could not be sent, or have to be updated, must arrive within three days. After that date, updates must be done through the upload of the appropriate daily file....

Alternative Dataflow Status

- ## *Guidelines for stations:*
  - ❖ A Backup solution is already requested from the stations and local data centers. There are some stations without a secondary data center.
  - ❖ The Backup solution was obviously not used by most of the stations and local data centers in the past.
  - ❖ A fixed time schedule for switching from primary to secondary data centers was intentionally not defined in the past, because suitable numbers had not been proposed.
- ## *Guidelines for data centers:*
  - ❖ OLG offered to act as backup for BKG and established required data transfers (daily and hourly files only, no products)

Alternative Data Flow Improvements

- **Request an alternative data flow scheme for data centers in the guidelines** (e.g. switch to DC one hierarchy up, clean-up after back to normality)
- **Develop a method to monitor the daily data flow** (this is also an issue within IGS to indicate file re-submission)
- **Collect proposals to define certain criteria which start the changes** (from primary to secondary data flow and back)
- **Install automatic procedures** (keep the balance between switches because of bad connections and timely reactions)
- **Test various methods for changes** (from primary to secondary data flow and back)

Possible Criteria for Changes

•**Sending data always to both DCs** *(Additional Internet loading 10 MB/day)*

•**Keeping redundant data at least one year** *(daily files)* **or 10 days** *(hourly files)* **at the secondary DC**

•**Or:**

•**Switch data flow at Operational Centers automatically after failure to reach primary DC** *(e.g. three trials within three different hours unsuccessful)*

•**Switch back to primary DC at Operational Centers after successful probe** *(e.g. once a day)*

•**Synchronization of missing data by retrieval** *(primary DC)* **or sending** *(from secondary DC)* **?**