## VTS Information Exchange

### Technical Aspects

The exchange of data is intended to increase the efficiency of VTS operations by sharing relevant data beyond the scope of a single VTS. This may, for instance, be the case for VTSs in adjacent areas, exchanging data about the traffic situation.

* Multiple Layers of information
  + Locally collected sensor data that is exchanged between VTS systems and other entities to enhance performance. As far as possible, sensor-specific data formats will be used to distribute the sensor data. This may concern:
    - Radar video, plots
    - EOS data streaming
    - AIS/VDES
    - Weather / Hydrological data
    - RDF

Where metadata describing the sensor data needs to be communicated: this can be done by specific IVEF messages.

The locally collected sensor data shall be distributed via industry standards, including but not limited to Asterix CAT-240 for radar, RTP (VoIP) for VHF, and H.265 for CCTV.

* + VTS Traffic Image. Note that there may be different definitions of the “traffic image” depending on the intended use (e.g. law enforcement may have different requirements for the image). The VTS Traffic Image contains all information about the vessels and their voyages to enable VTS operations i.e.
    - Vessel static data
    - Voyage data
    - Vessel track data
  + Route Exchange. This concerns the exchange of the intended vessel path with estimated ETAs at waypoints. Route exchange in the scope of S-421 will be the responsibility of the vessel. After a viable route is established, any updates, including the ATAs and possibly new ETAs, will be distributed to the VTS Providers by the vessel.
  + Navigational warnings: this is under the scope of S-124.

## Technical Maritime Services

Explain relationship of above aspects with DMS