



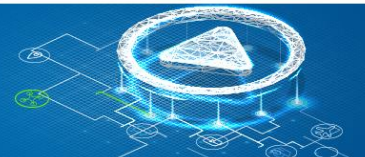
Virtual Centres : the Business models

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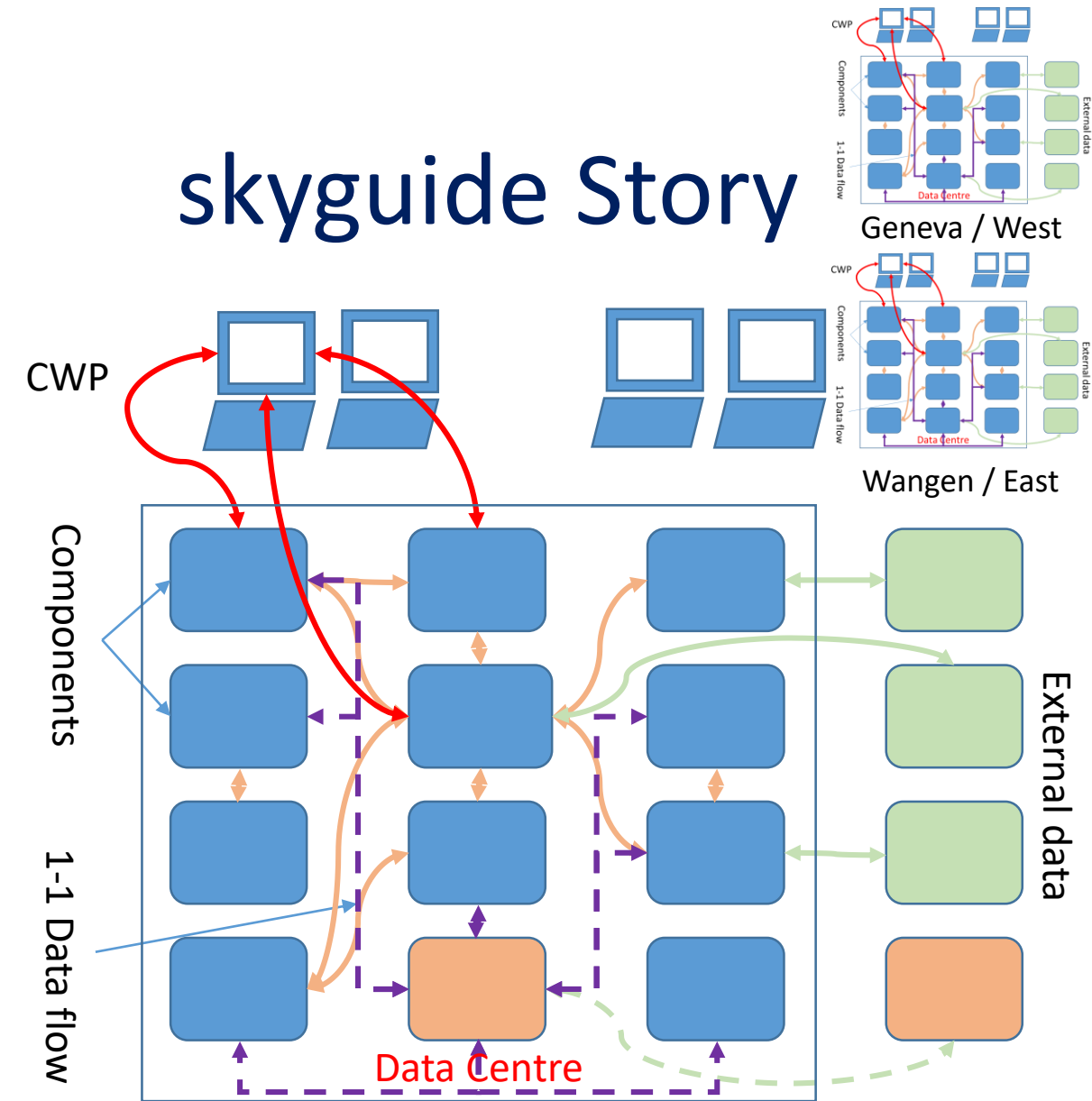


Content

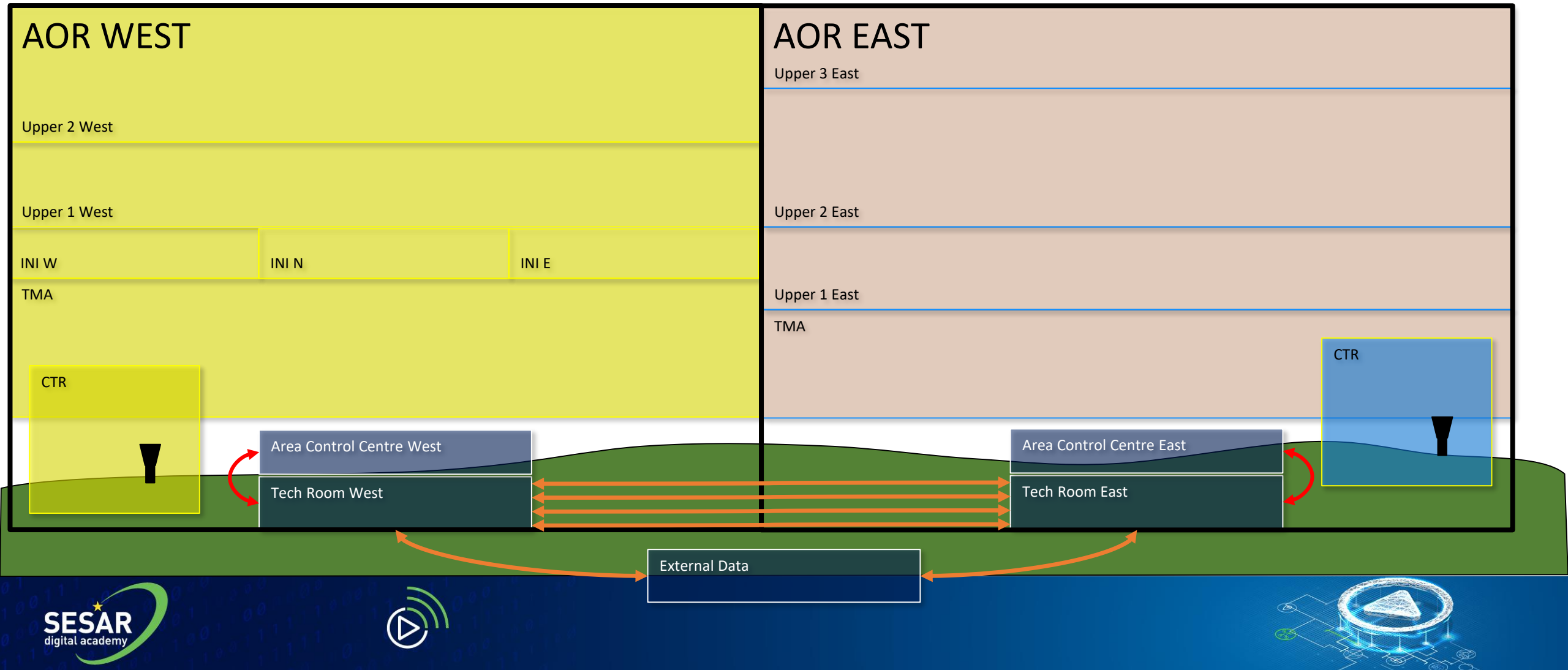
- The skyguide story
- The Business models
 - **Intra Service providers**
 - **Inter Service providers**



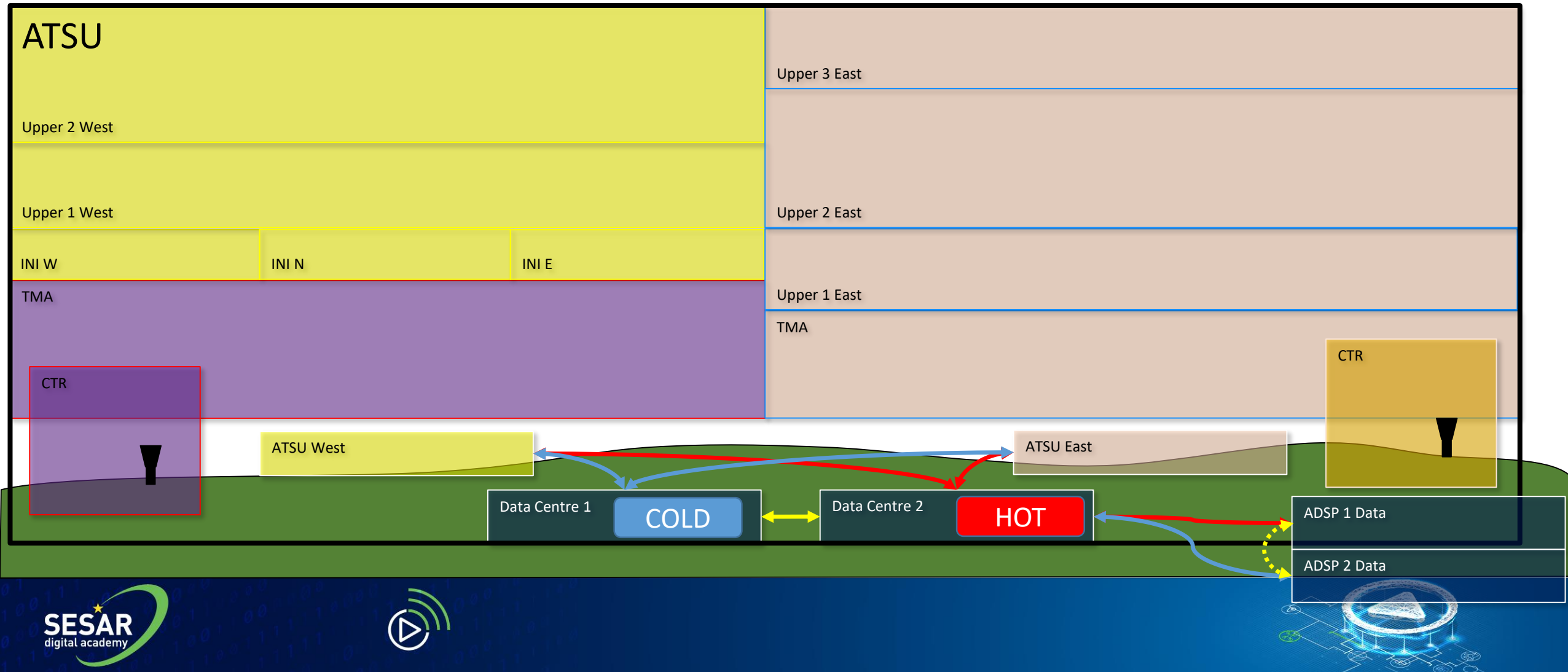
skyguide Story



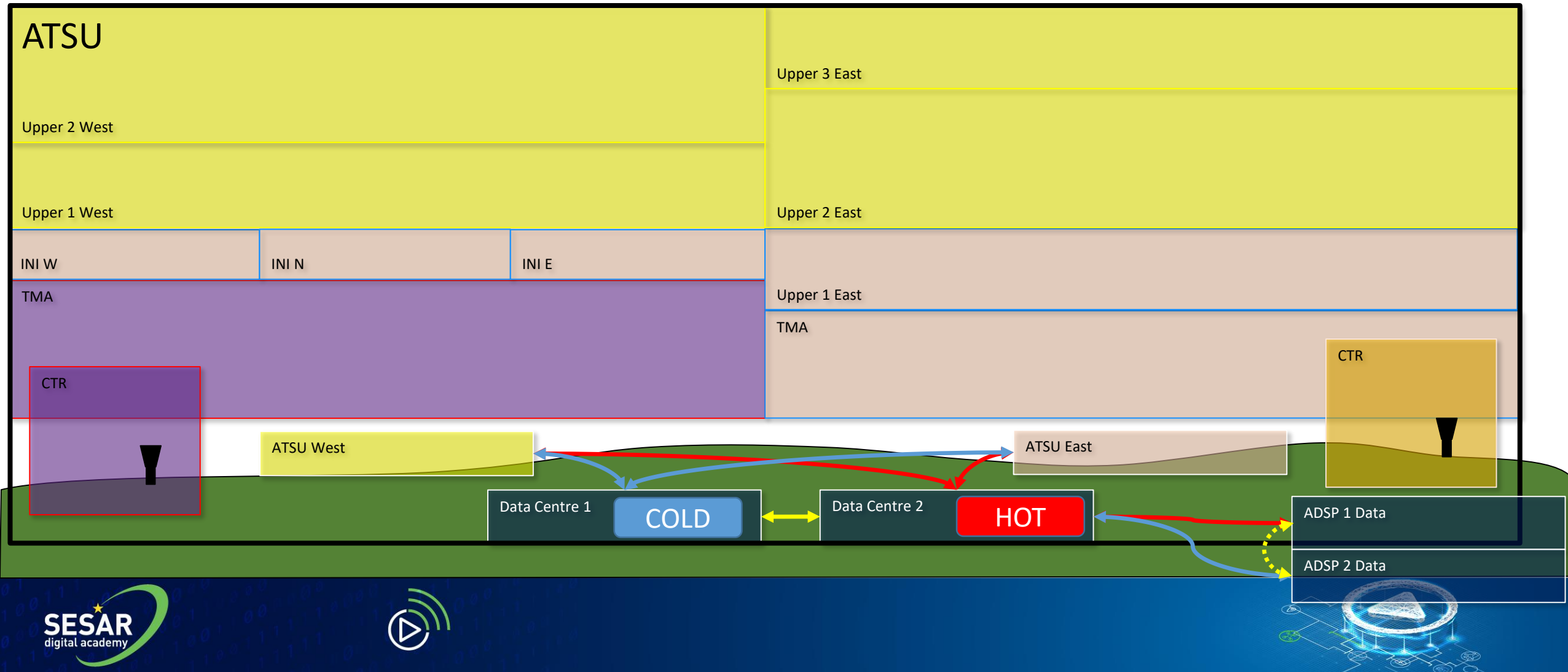
Operational changes



Operational changes



Operational changes



Intra Service Provider Business model

- One Airspace by One (logical) System
 - SOA architecture realised with a commercial Enterprise Service Bus (TIBCO) deployed on virtualized platforms
- Logical harmonisation / unification at application level
- Reduction of TEC infrastructure through Data Service
- Staff Optimisation through flexible airspace allocation and function centralisation
- Future ADSP – ATSU relationship
 - first test ADSP services provided by CCS from DSNA-Paris to skyguide-Zurich

Inter Service Provider Business model

- ADSP Business model
 - Need for multiple ADSPs to have a real market
 - Standard open interfaces
- ATSU Business model
 - Location independence (control from everywhere to anywhere)
- Contingency Business model
 - Resilience
 - Ability to rapidly transfer control to allow service continuity
 - Scalability
 - COVID experience shows certain lack of full scalability

Institutional Business Model

- Key trigger for Dynamic Airspace Configuration (DAC)
- Capacity balancing beyond local Area of Responsibility
- Airspace delegation possible beyond neighbouring ANSP
 - For the time, delegation is mostly limited to cross-border areas between neighbouring ANSPs.
- Expected future
 - Capability of supporting the sectors suffering from a lack of capacity from areas with residual capacity (e.g. – delegation of sectors/airspace from the Core area to the outer regions of the European Airspace)

Virtual Centre implementation

- The definition of the Virtual centres is a joint venture between all stakeholders of the system
 - ANSPs, ADSPs, Manufacturers, Regulators and Oversight (certification) entities at national and EU-wide level
- Definition of ideal service to remain in the hands of the ANSPs (→ prevention of the "SAP Syndrome")
- Flexibility is key
 - ATSU should not be limited to operate only a remote terminal
 - Local functions and developments are needed at ATSU level to preserve innovation capabilities