

TAF-TSI Rollout Common Tender and Industry Development

UIC eBusiness Conference
11 October 2007

Content

- The TAF-TSI Rollout
 - What is it?
 - How do we get there?
 - Where are we?

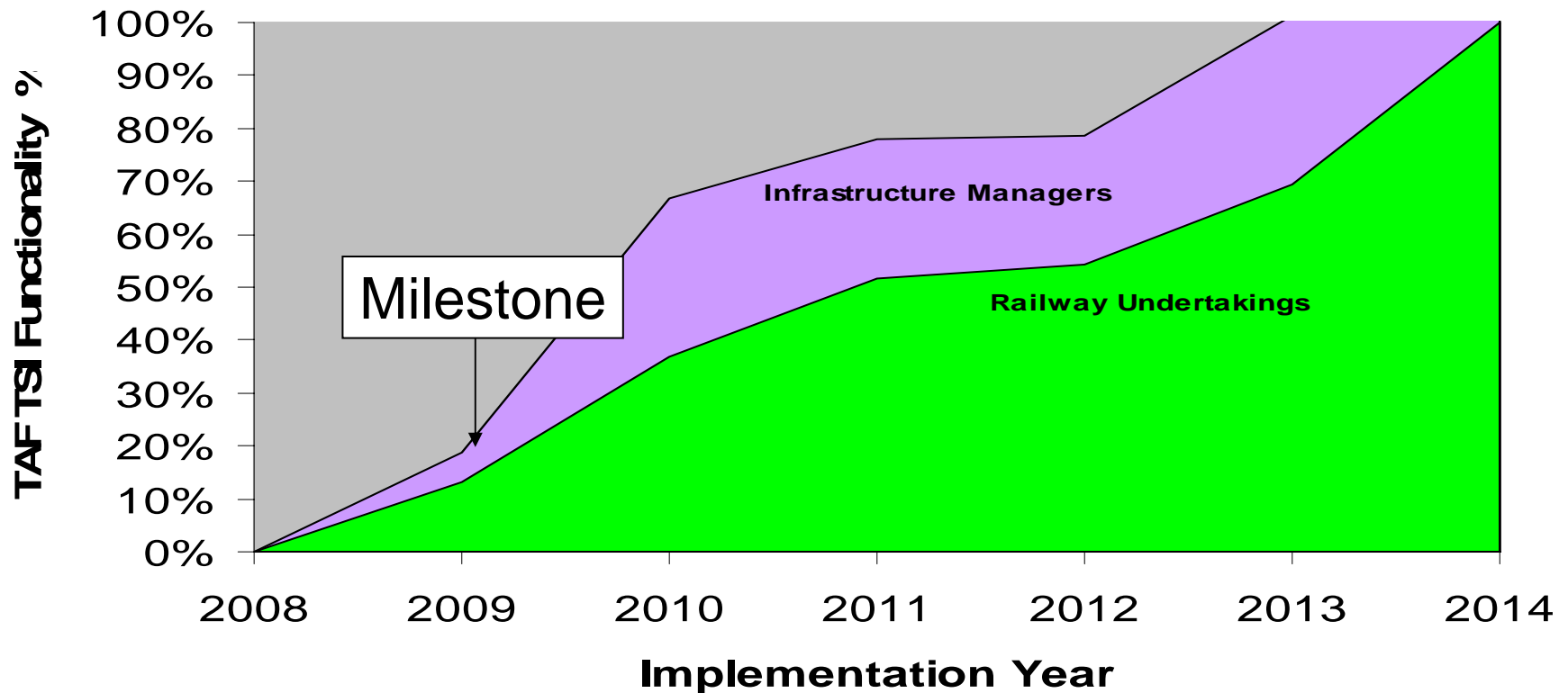
The TAF TSI



- Is an open data layer across all rail actors
- Is Compulsory -Became a Regulation on 18th January 2006
- Implementation commitment of the rail actors is documented in the Strategic European Deployment Plan (SEDP), submitted to the EC in January 2007

SEDP Agreed Timeline

European Rail Freight Industry TAF TSI Strategic European Deployment Plan



TAF TSI Functions

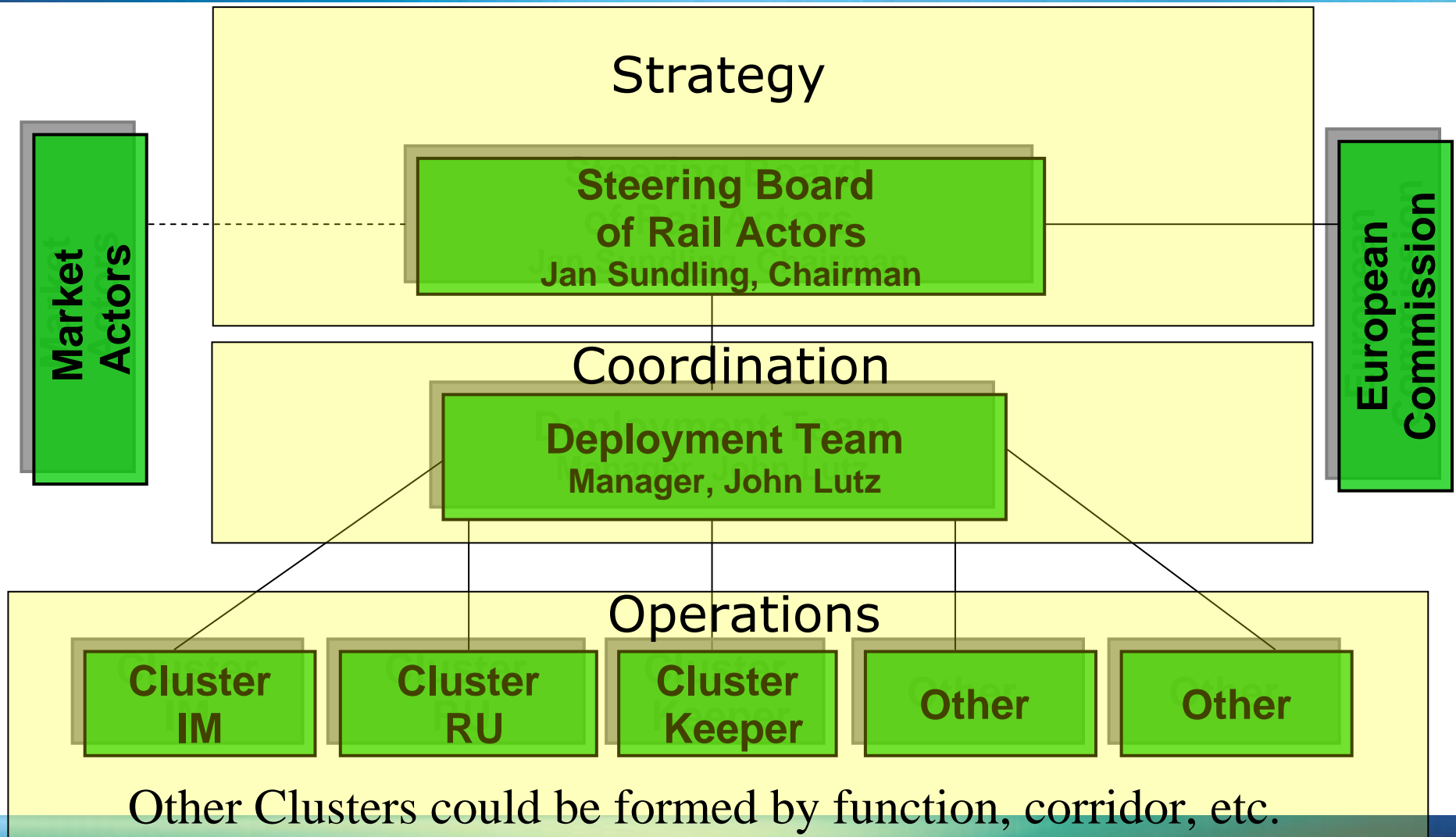


- Freight train path reservation – ad-hoc and instant capacity;
- Marshalling and train preparation;
- Monitoring of freight wagons and freight trains;
- Connections with other freight modes;
- Production of accompanying electronic documents.

Governance Structure Need

- Need to put a structure into place for rapid development/modification of:
 - Common Interface - connectivity(Communication between Stakeholders) – by 2008
 - Reference Files – coding (Supporting the individual Applications) – by 2008
 - International applications supporting TAF TSI functions (Such as Raildata and RNE Systems) –stepped implementation to 2012
- Must respect the Milestones reflected in the Plan – Legal Requirement of the Regulation

High-Level Governance



Steering Board

- Chaired by a committed and experienced person of CEO status (Jan Sundling, is Chairman)
- Committee formed of a specific number of nominated representatives from the Stakeholders and Associations (UIC, CER, EIM, ERFA, CIT, etc.) Membership is still open to those who wish to participate.
- Responsibilities of the Steering Board cover the following:
 - To Steer and prioritise implementation programme
 - To Support the Deployment Manager, who will act as the overall Programme Manager on a day to day basis.
 - To Provide formal liaison with the European Commission on compliance, through the Chairman.

Deployment Team

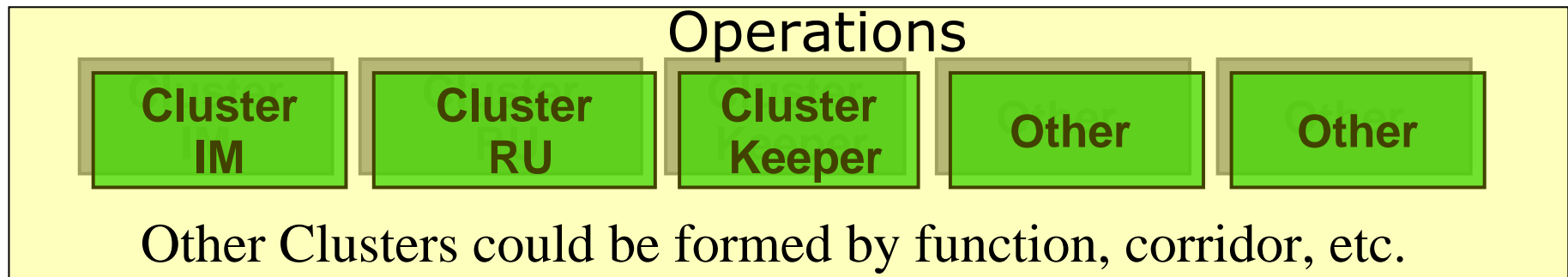


- **Manager**
 - Acts as the overall Programme Manager
 - Dedicated
 - Direct Reporting to the Steering Committee
 - Coordinate the activities and resolve conflicts between the RU and IMs
- **Deployment Team**
 - Monitoring and Reporting progress/Milestones
 - Dedicated and financed by common budget
 - Coordination of implementation - working with individual Stakeholders
 - Using the infrastructure and legal framework of UIC

Operations

Clusters

- Act as Coordinators of like groupings of stakeholders
- IM-IT will serve as IM Cluster
- Responsible for the realisation of the TAF-TSI functions
- Others are being formed – no Cluster 'Rulebook'



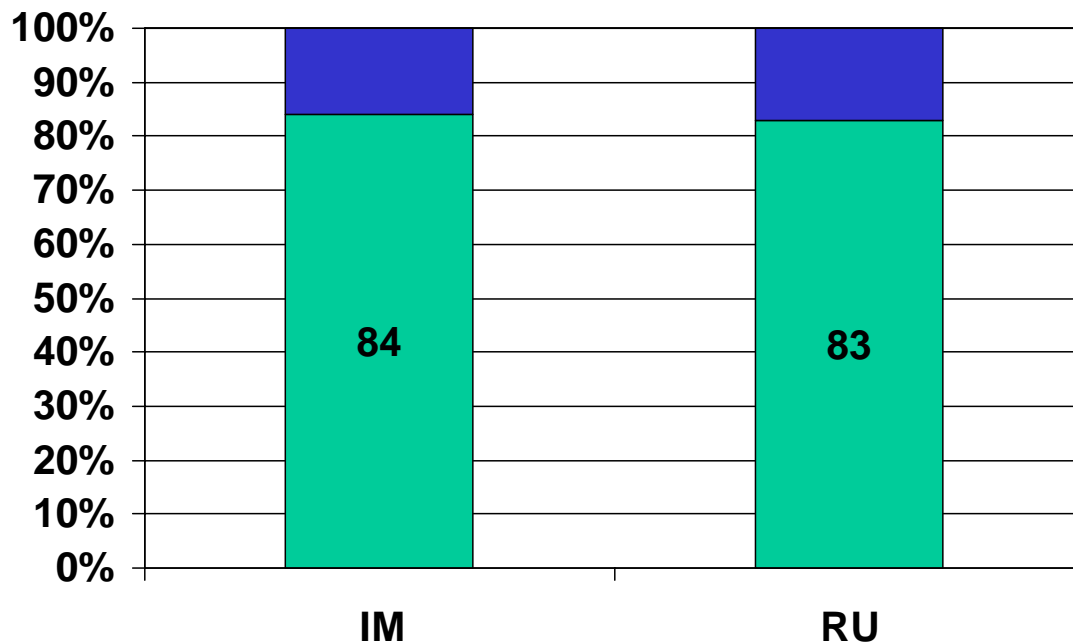
Next Steps - Deployment

- Budget submission to the UIC EMC on 17 October 2007
- Tender for Development of Common Components by mid- November
- Operation of the Common Components may be tendered or assigned
- A Technical Team will be established within the Deployment Team to work with Operations

Financing Needs

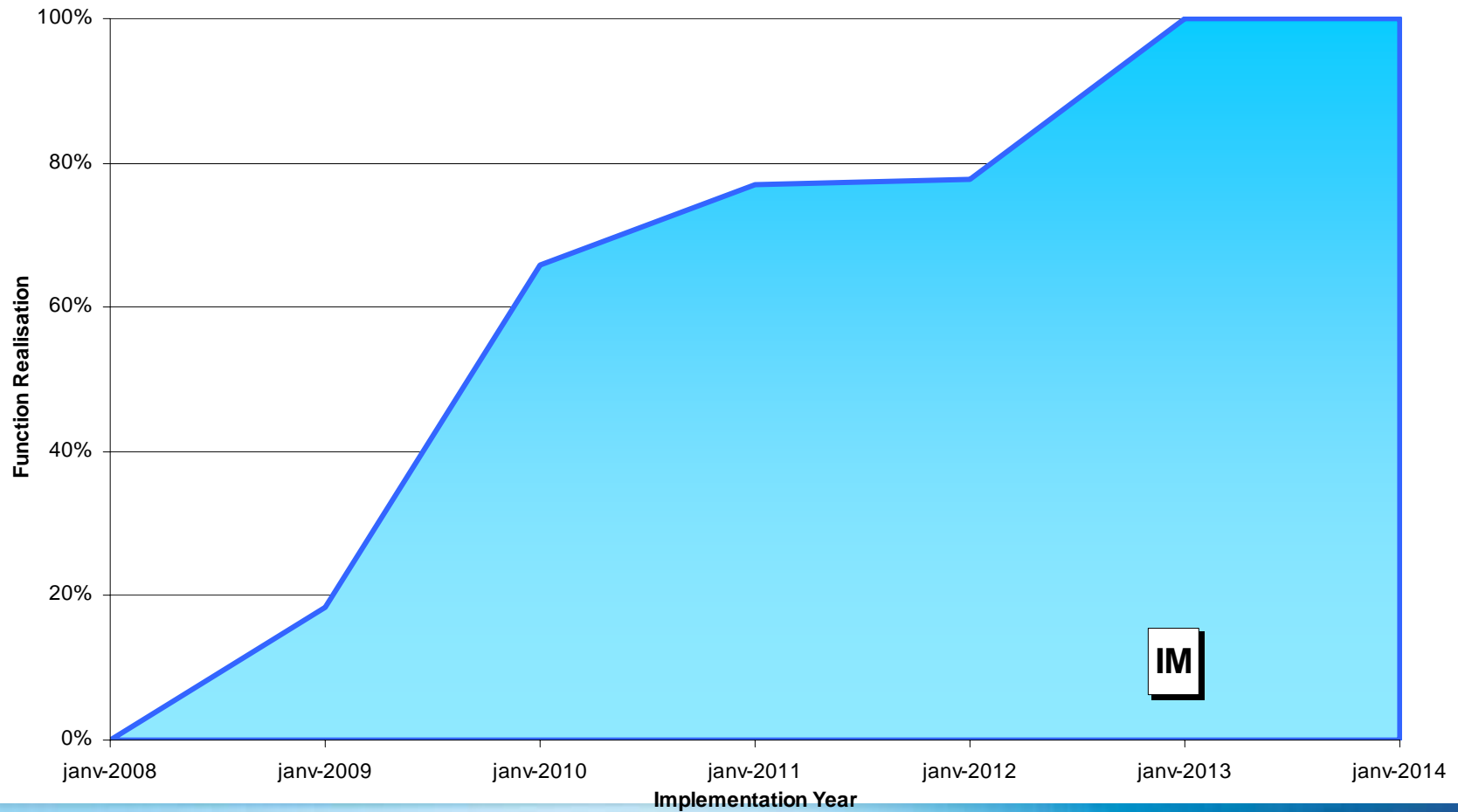
- **The Steering Board approved a self-funding scenario**
 - Assure the successful outcome of the development project
 - Maintain current governance and financial oversight
 - Provide for open and free license of the Intellectual Property of the applications
- **Funding Proposal from the Commission**
 - Application for TEN-T funding has been submitted to the Commission for (10% – 30%) co-financing of works

RU and IM Responses

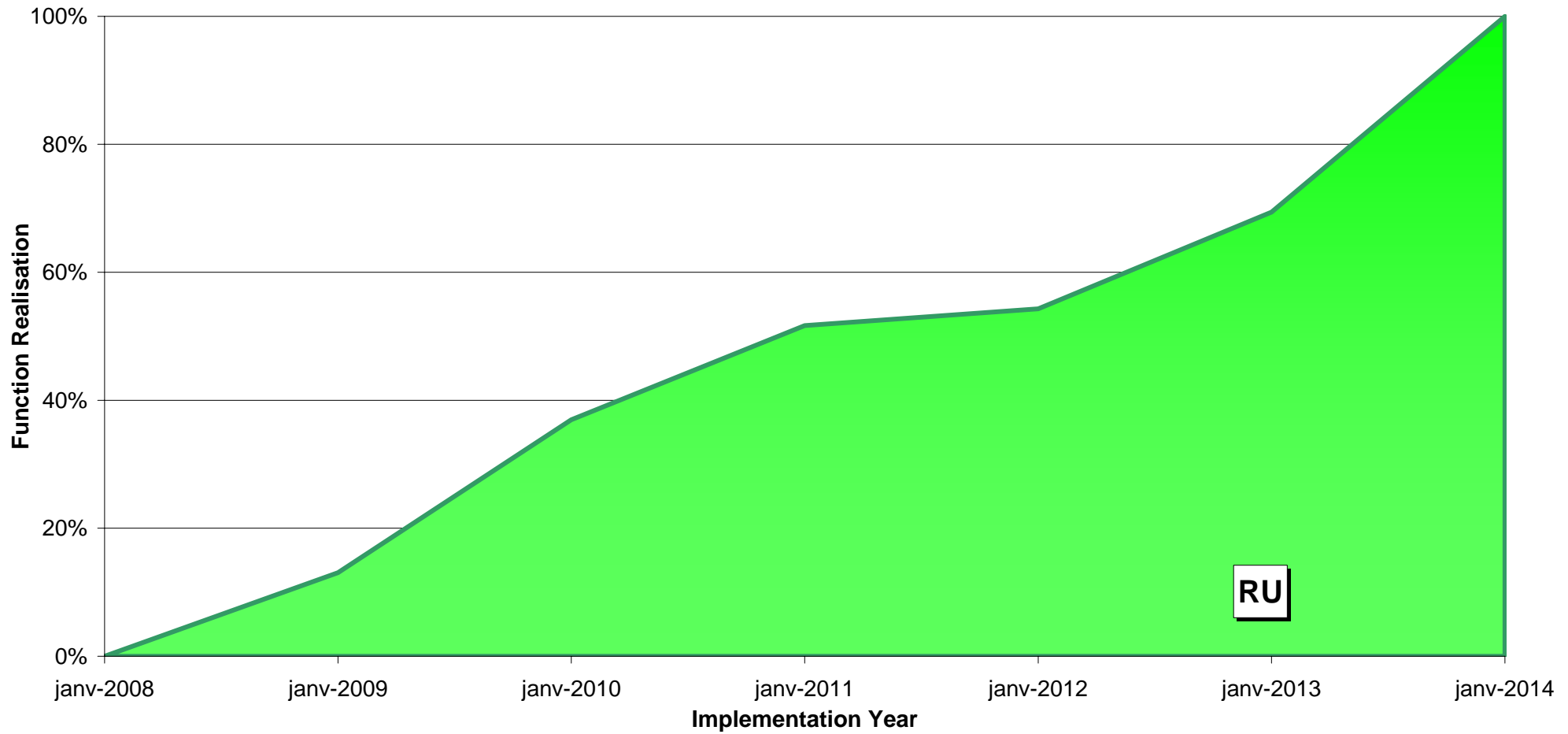


- All responses are weighted
 - IM in KM of Track
 - RU in Tonne KM

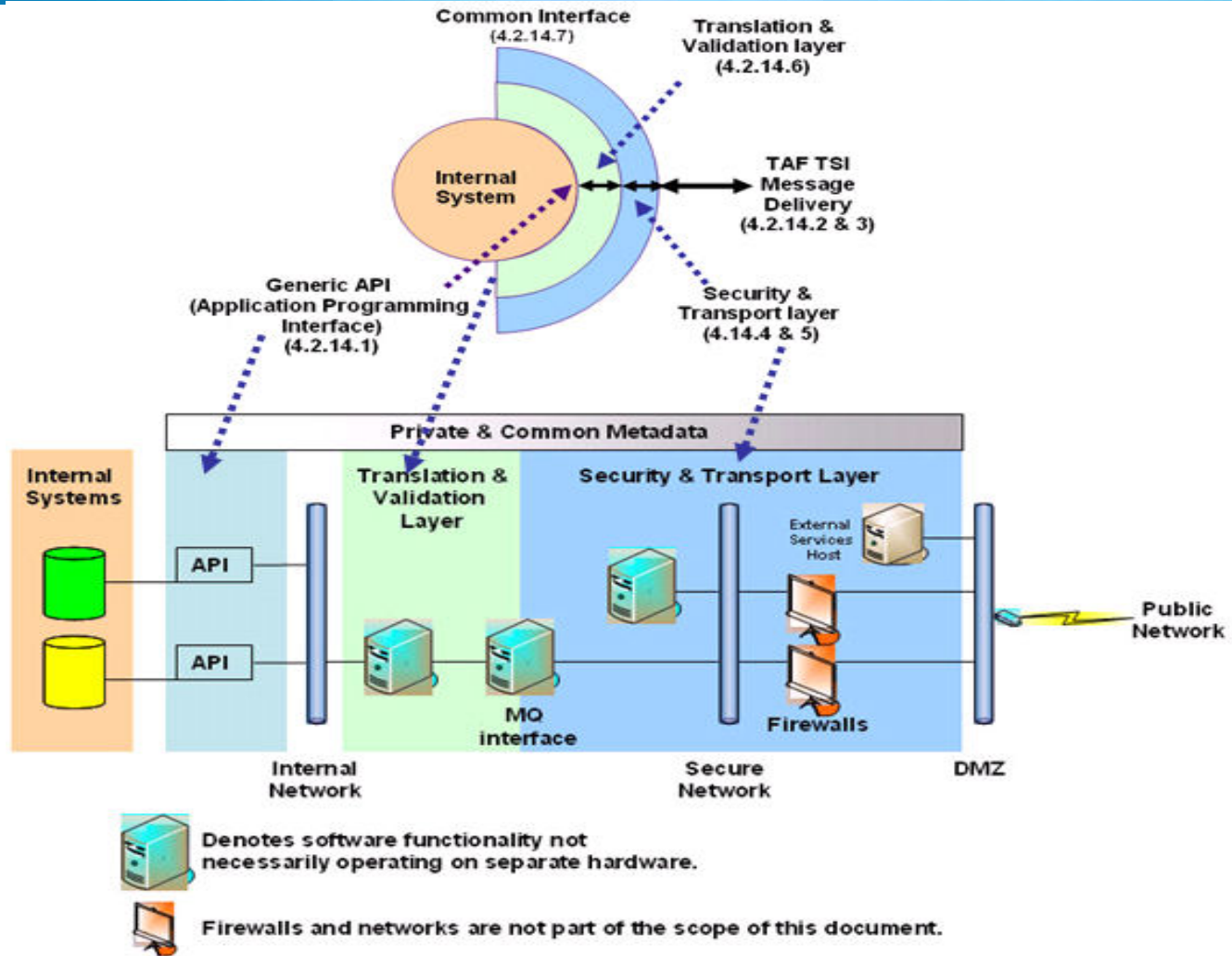
IM Implementation



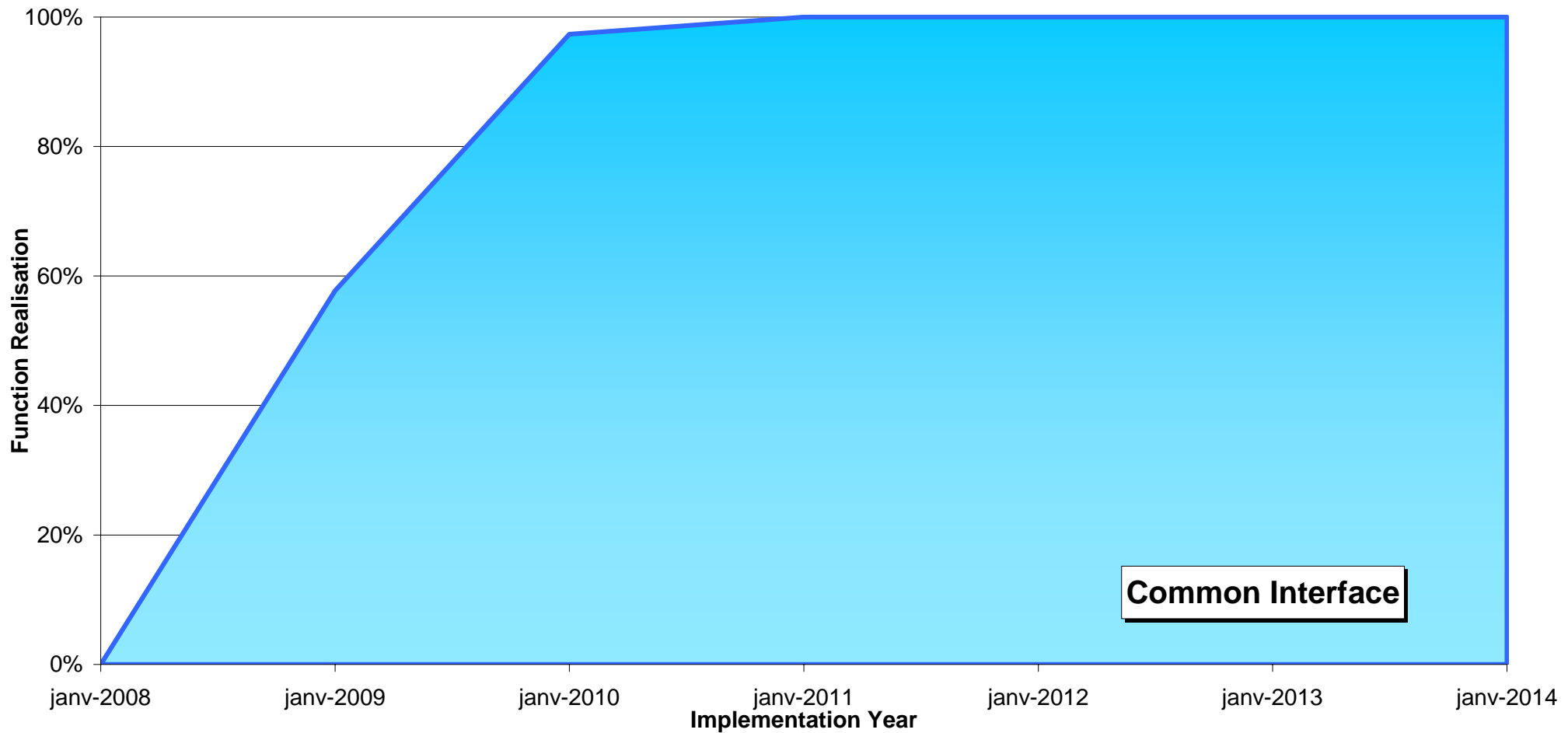
RU Implementation



TAF TSI Common Interface



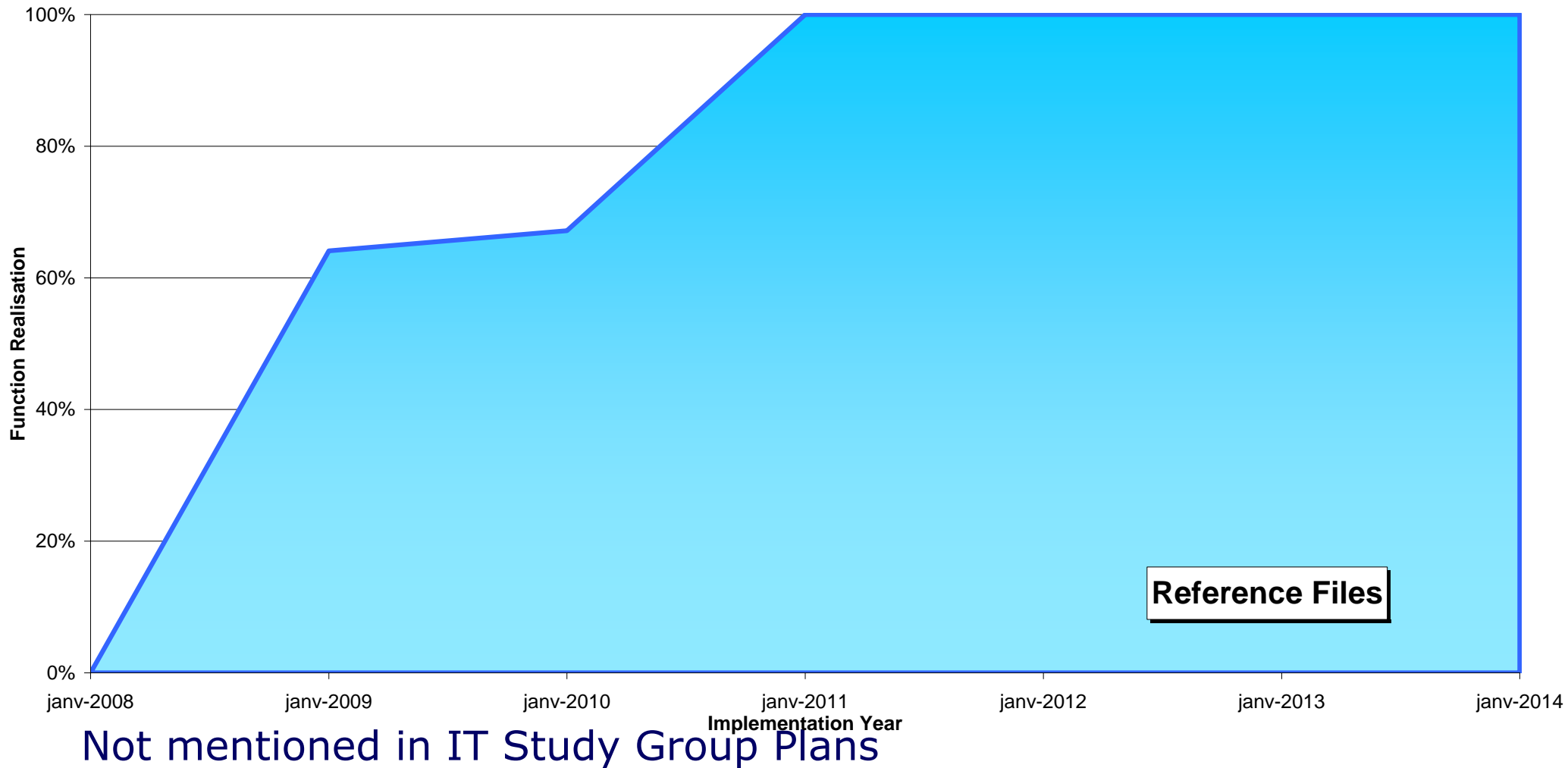
Common Interface Implementation



Reference Files

- **LocationIdent**
 - Uniquely identifies locations (ENEE)
 - Used throughout IM Applications
 - Maintained by Infrastructure
 - Centralised
- **CompanyIdent**
 - Uniquely identifies Companies (RICS)
 - Used throughout IM Applications
 - Maintained by UIC/OSJD
 - Centralised

Reference File Implementation



Establish Reference Files

- **ENEE**

- Identify the responsible parties for maintenance of IM locations
- Establish Rules of Maintenance
- Automate updates for IM locations
- Integrate into international applications and messages

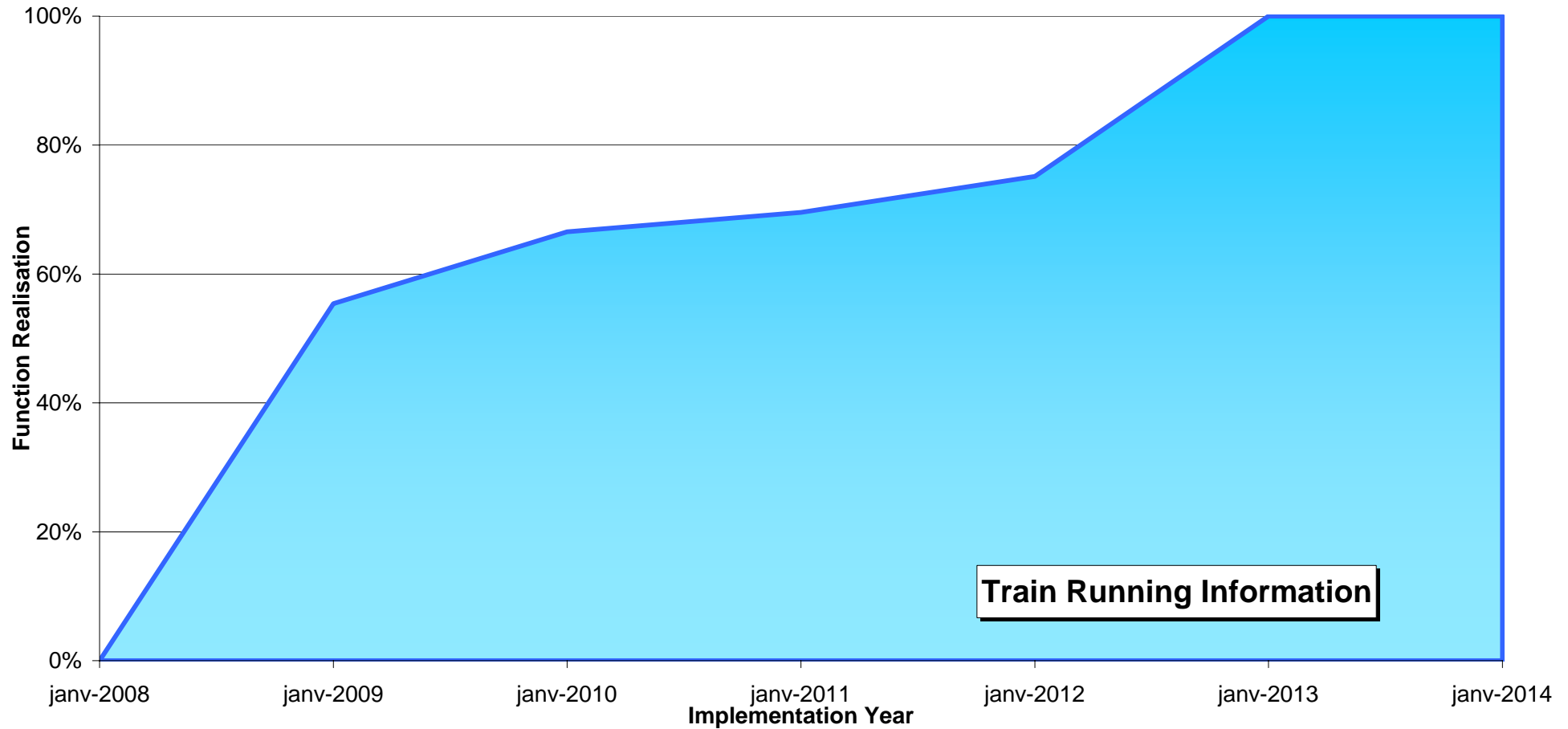
- **CompanyIdent**

- Integrate into all international applications and messages

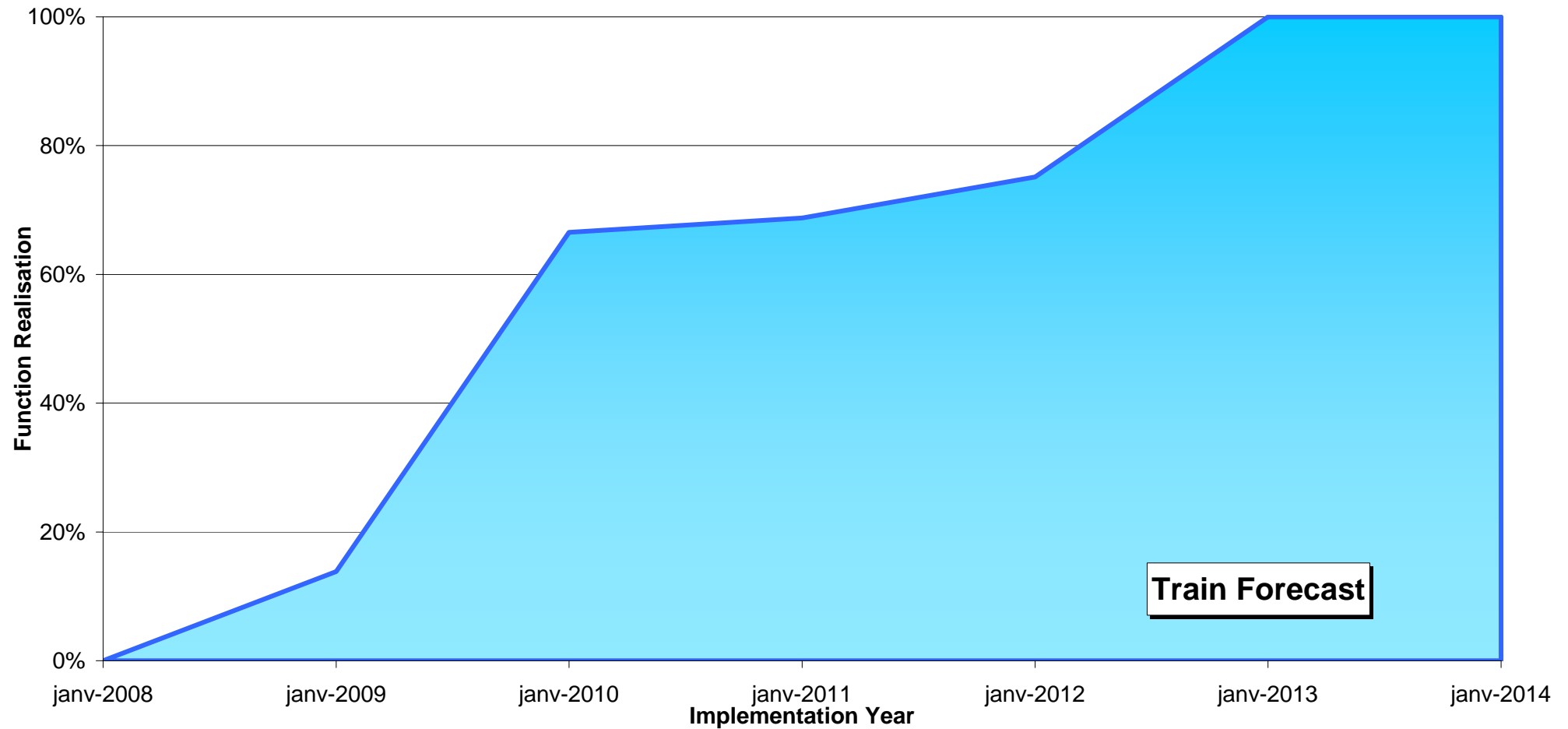
Train Monitoring Function

- Enquiry/Response TrainRunningForecast
- Enquiry/Response TrainRunningInformation
- Enquiry/Response TrainDelayPerformance
- Enquiry/Response TrainIdentifiers
- Enquiry/Response TrainsAtReporting Location
- Service Disruptions

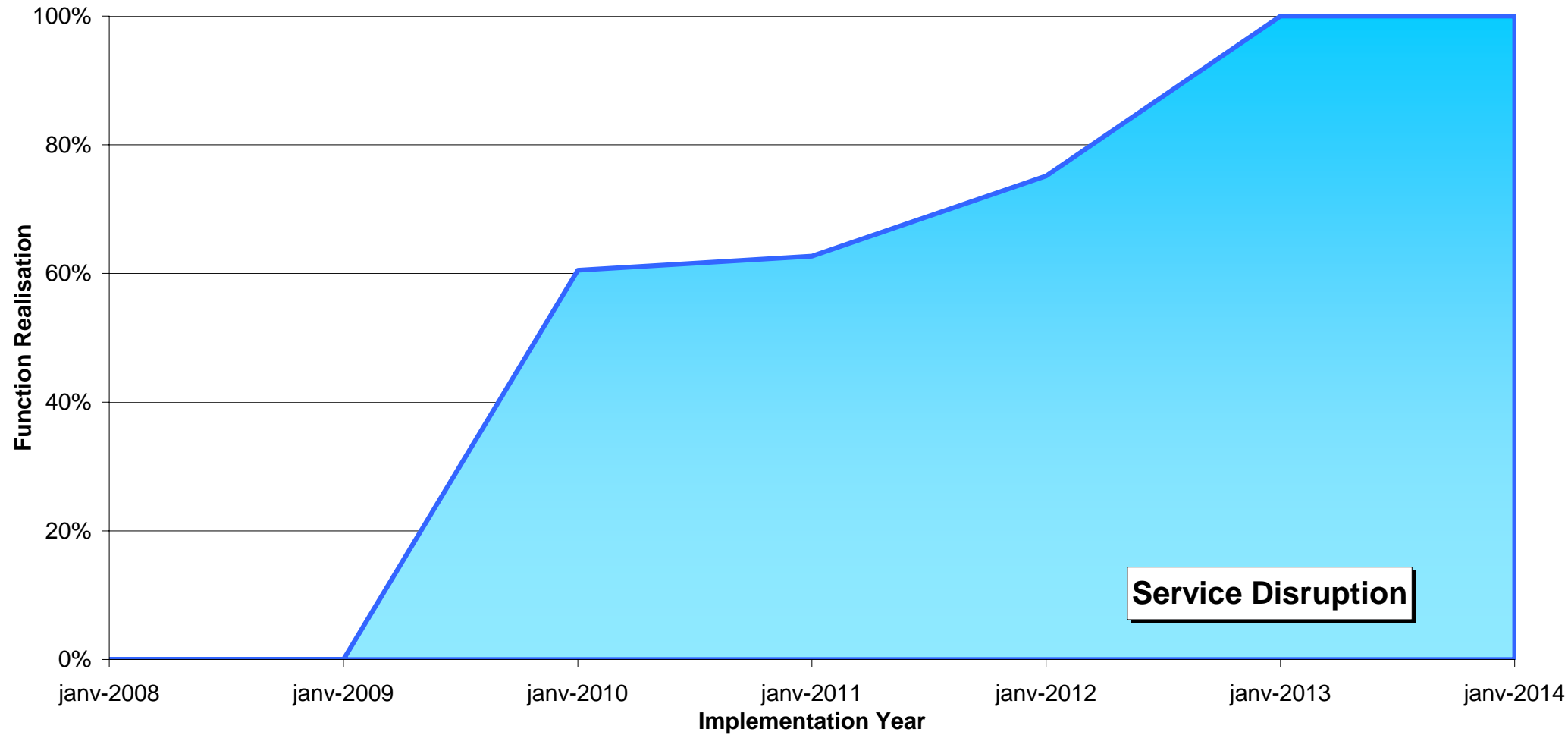
Train Running Information



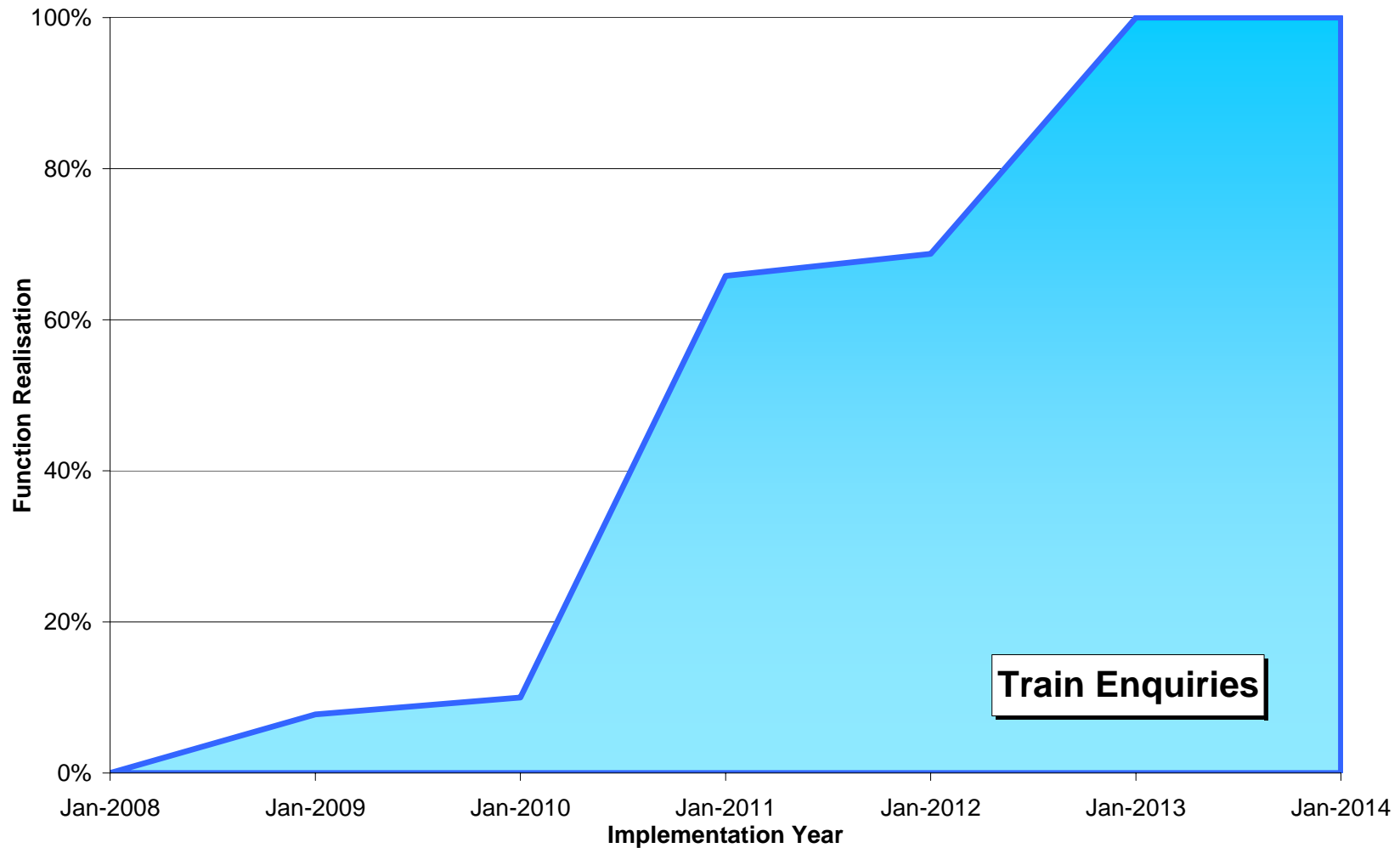
Train Forecast Information



Service Disruption



Train Enquiries/Responses



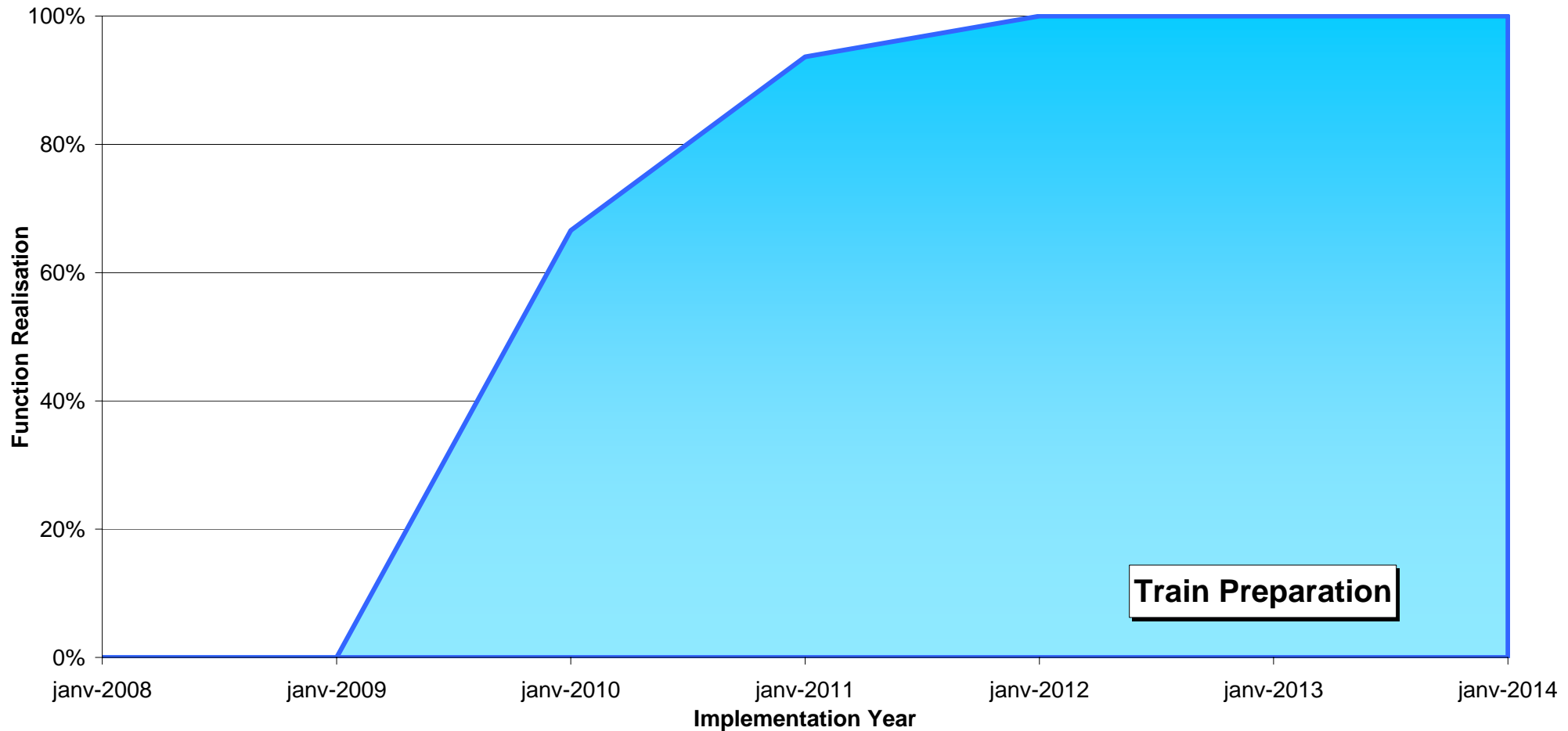
Establish Train Monitoring

- Use Europtirails to meet the requirements of this function for international trains
- Extend usage of Europtirails
- Adapt the National Systems to provide information on all international trains
- Adapt Europtirails to
 - Send messages to RU's
 - Allow enquiries from users

Train Preparation Function

- TrainComposition – Depending on Network Statement Requirements
 - TrainReady – Depending on Network Statement Requirements
 - TrainAccepted*
 - TrainNotSuitable*
 - TrainPosition*
 - TrainAtStart*
- (*Optional)

Train Preparation

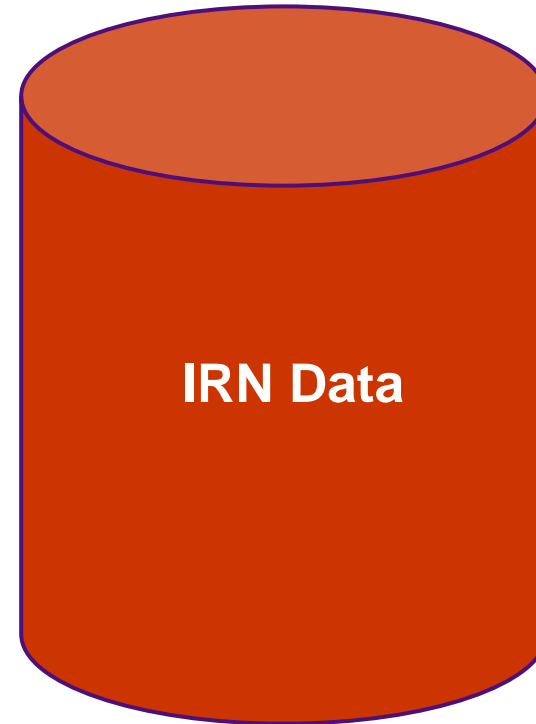


Establish Train Preparation

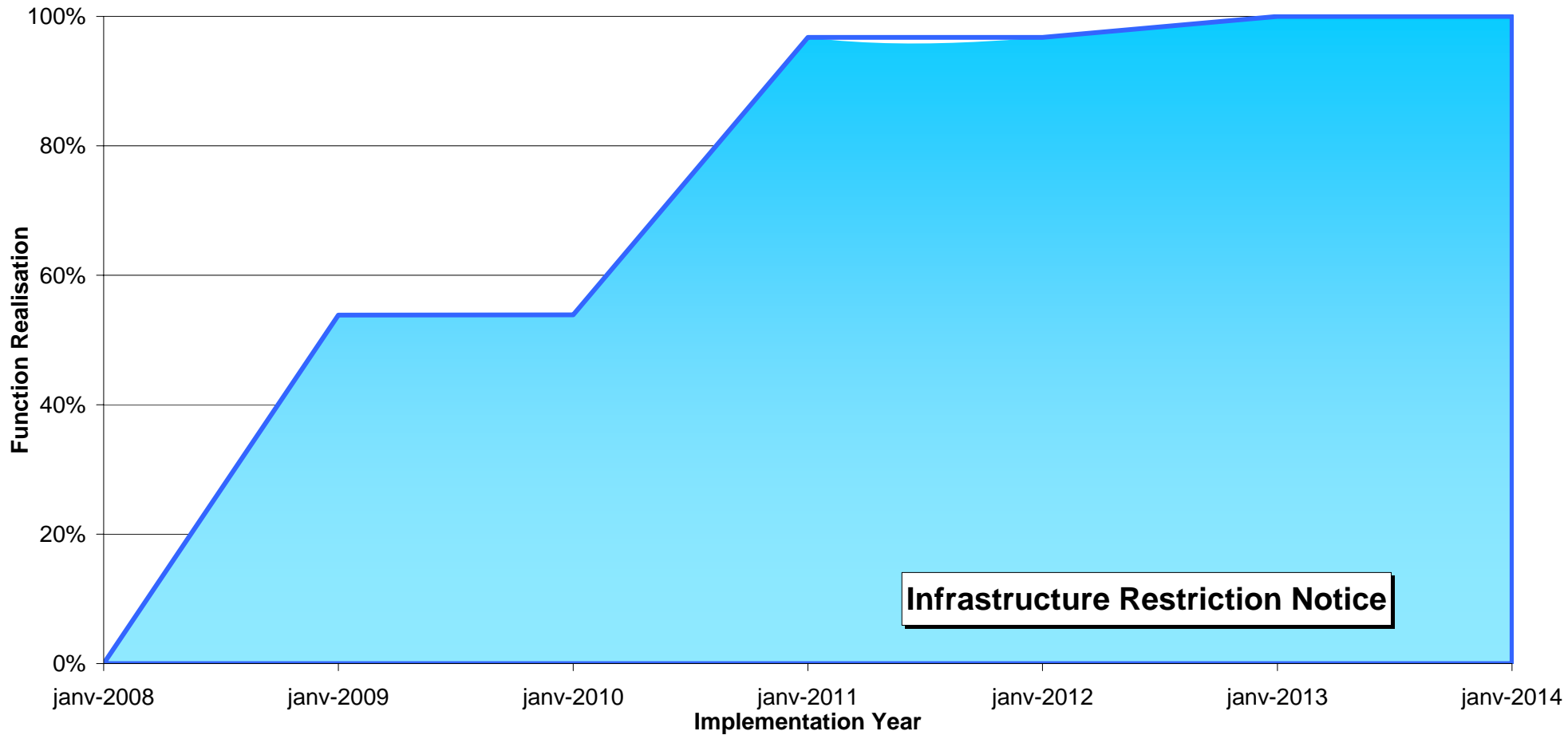
- Affects individual IMs – not a centralised application
- IMs need to prepare to receive information from the RUs
- Business process for this function should be validated by the users
 - IMs may need to prepare the optional responses back to the RUs
 - Some of this function may not be needed

Infrastructure Restriction

- Used to supplement the Network Statement for Temporary Network Restrictions
- Maintained by the individual IMs – but could have a centralised architecture
- Must be accessible via the Common Interface



Infrastructure Restriction Notice



Not mentioned in the IT Study Group Plans

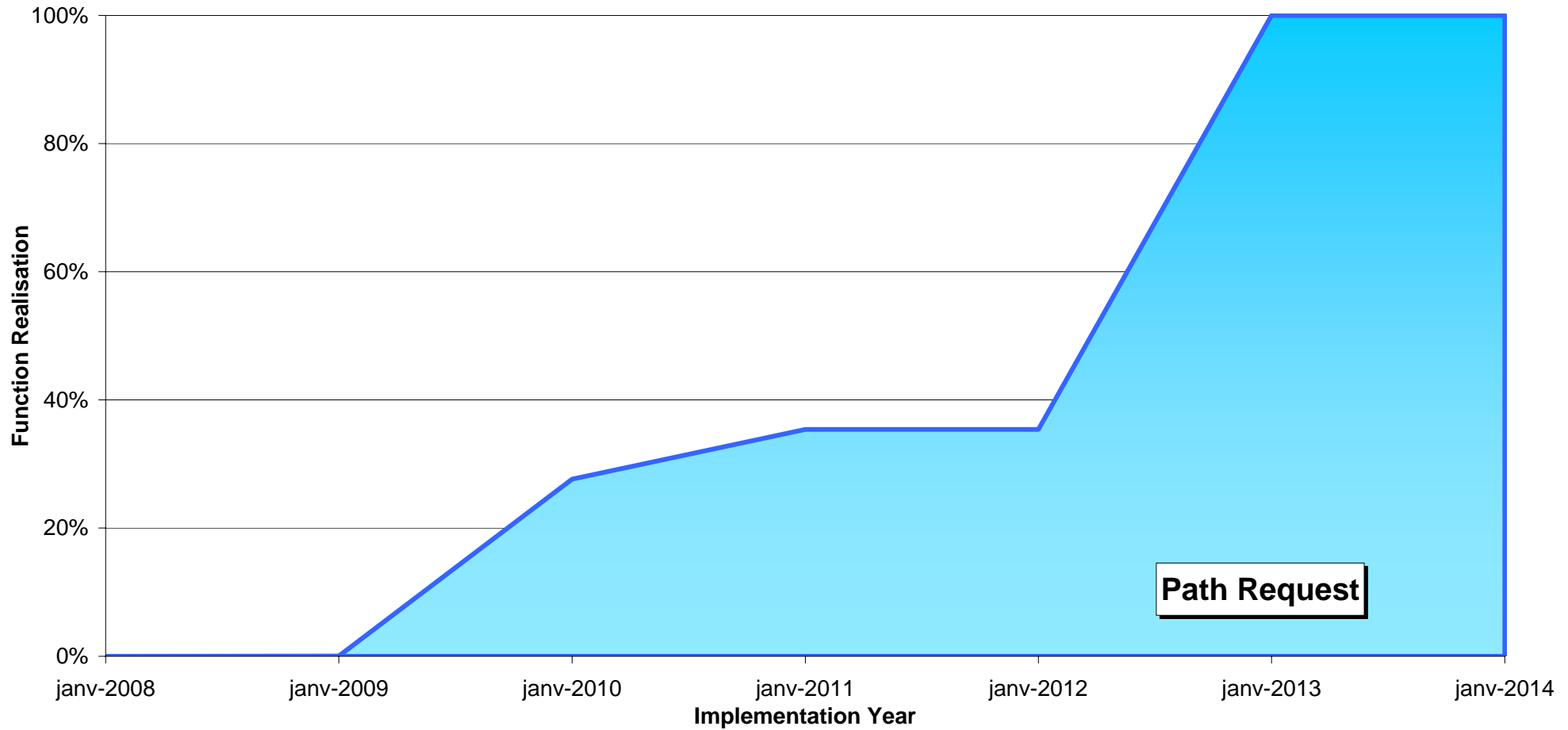
Establish IRN(s)

- Determine individual or common developments
- Harmonise the data content
- Develop business process for consultation and response with RUs
- Implement interface and messages for updates and enquiry/responses

Path Request Function

- PathRequest
- PathDetails
- PathConfirmed
- PathDetailsRefused
- PathCancelled
- PathNotAvailable
- ReceiptConfirmation

Path Request



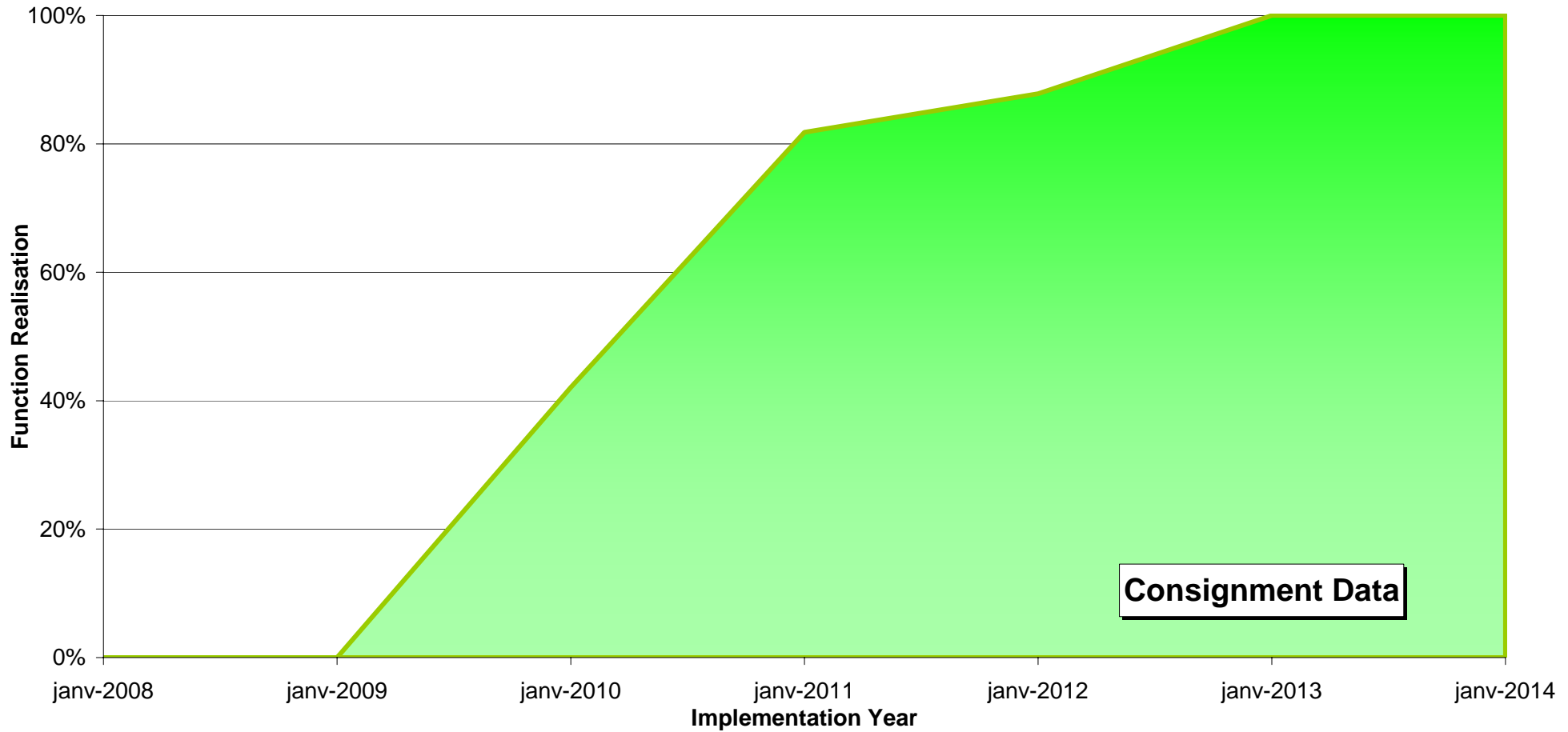
Establish Path Request

- Clarify the IM business processes for Ad-hoc and Instant Capacity path allocation
- Coordinate business process with RUs
- Possible adaptation of Pathfinder – Europtirails to the established processes as an interface with the RU
 - Adaptation to a real-time environment
 - Capability to communicate with traffic management centres
 - Knowledge of all transition rules between the time tabling services and the operational services for all participating IMs
 - Transmission of new timetables directly to Europtirails

Consignment Note Function

- Consignment Note Data
 - has to be sent by the Customer to the Lead RU
 - Must contain all information needed to carry a consignment from A to B
 - selected data must be accessible for all partners
 - e.g. load weight, dangerous goods information
- Wagon Order:
 - subset of the Consignment Note information
 - Must be forwarded to the RUs involved in the transport chain
 - must contain information for an RU during its responsibility
 - content dependent on the role to be performed by the RU:
 - Origin-, Transit- or Delivery RU
 - Benefits: supports operational arrangements

Consignment Note Function



Shipment ETA/ETI Function

ETI: Estimated Time of Interchange

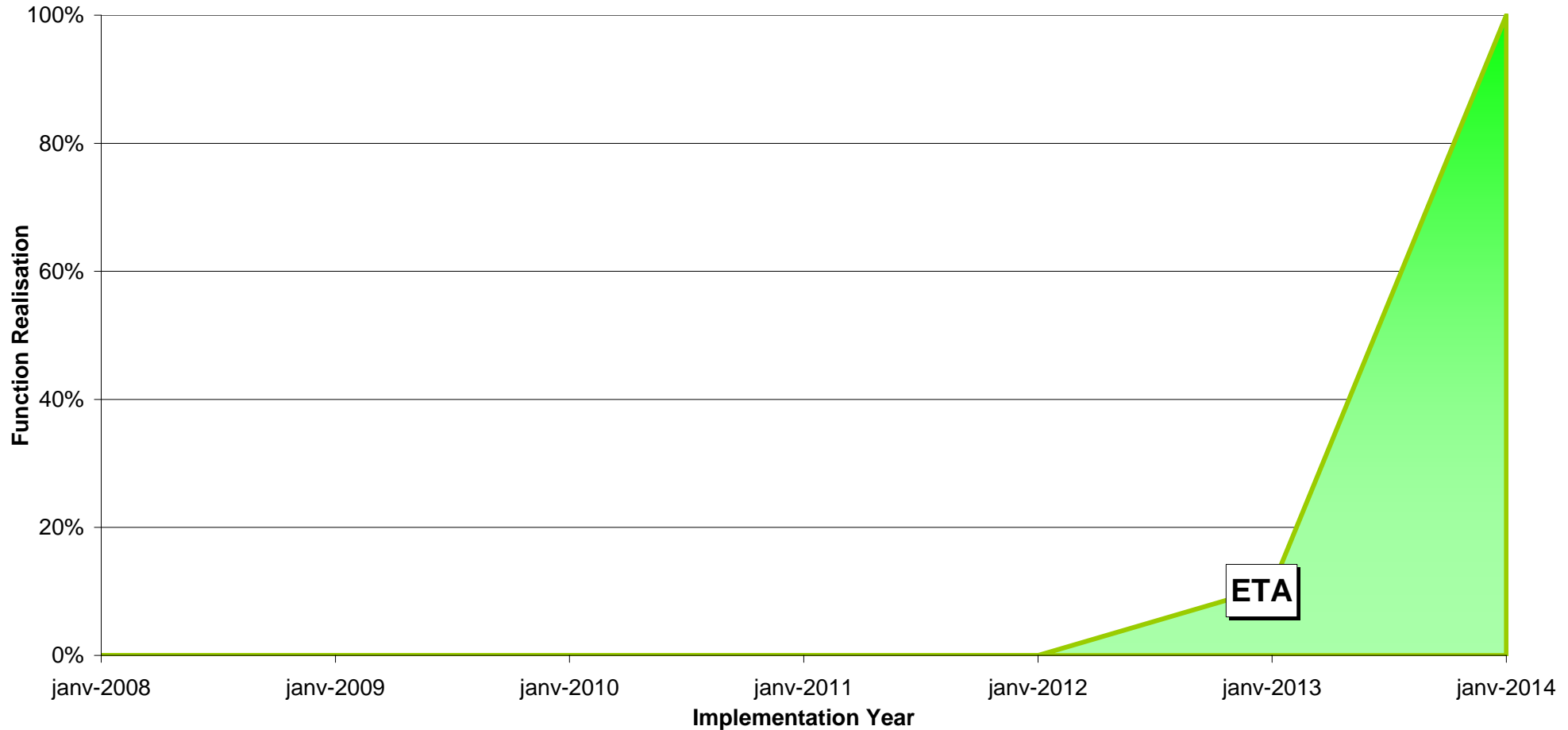
ETA: Estimated Time of Arrival

- ETA for his shipment is the most important information for a customer
- The ETA for the Wagon must be sent to the LRU.
- The ETA must be electronically stored along with wagon movement
- For each wagon the Lead RU must establish/update a wagon trip plan

• **Benefits:**

- Meeting customer needs
- Improved Fleet management

Shipment ETA/ETI Function



Wagon Movement Function

- **For the reporting of the movement of a wagon, the following data must be stored and electronically accessible**
 - Wagon Release notice
 - Wagon Departure notice
 - Wagon Yard arrival
 - Wagon Yard departure
 - Wagon Exceptions message
 - Wagon Arrival notice
 - Wagon Delivery notice
- **Benefits:**
 - **Customer Service:** Delivering reliable location and status information
 - **Fleet productivity:** Supports better managing of the wagon fleet

Wagon Movement Function

