Central Service Registry

Kineton

DVB-I service

A DVB-I service is one which is discovered using standard specification and which is available over DVB-DASH.

may be delivered over non-managed connectivity alone

may also be received by non-TV devices as defined by DVB

may include access services and may be linear or on-demand and

may have associated applications (similar to AIT in broadcast delivery)

may include video, audio and subtitle components

Service Lists

Service Lists are published by Service List Providers and typically lists services from many content providers. The role of the Service List Provider is to curate and manage the Service List and provide service ordering and numbering information for ease of selection by users, particularly on television-like devices.

DVB-I clients access information about DVB-I services through Service Lists.

```
▼<ServiceListEntryPoints xmlns="urn:dvb:metadata:servicelist
   xmlns:tpvtv="urn:tpv:metadata:tv:broadcast:2020" xmlns:xsi=
   dvbi_service_list_discovery_v1.1.xsd urn:dvb:metadata:servi
  ▼<ServiceListRegistryEntity regulatorFlag="true">
     <Name type="main">Kineton</Name>
   </ServiceListRegistryEntity>
  ▼<ProviderOffering>
    ▼<Provider regulatorFlag="true">
       <Name type="main">Mediaset TrustedServiceList</Name>
     </Provider>
    ▼<ServiceListOffering regulatorListFlag="true">
       <ServiceListName xml:lang="ita">Trusted Service List</
      ▼<ServiceListURI contentType="application/vnd.dvb.dvbis
         <dvbisd:URI>http://kinedev.it/dvbi/icsr/sl/Italian_t
       </ServiceListURI>
      ▼<Delivery>
         <DVBTDelivery required="true"/>
        ▼<ApplicationDelivery>
           <ApplicationType contentType="application/vnd.dvb.a
           <ApplicationType contentType="application/xhtml+xml
         </ApplicationDelivery>
       </Delivery>
       <TargetCountry>ITA</TargetCountry>
     </ServiceListOffering>
  </ProviderOffering>
  erOffering>
  ider regulatorFlag="false">
  e type="main">Mediaset TrialServiceList</Name>
  vider>
  iceListOffering regulatorListFlag="true">
  rviceListName xml:lang="ita">Trial Trusted Service
  rviceListURI contentType="application/vnd.dvb.dvbis
  vbisd:URI>http://kinedev.it/dvbi/icsr/sl/TrialServi
  erviceListURI>
  livery>
  VBTDelivery required="true"/>
  pplicationDelivery>
  <ApplicationType contentType="application/vnd.dvb.a
  <ApplicationType contentType="application/xhtml+xml
  ApplicationDelivery>
  </Delivery>
  <TargetCountry>ITA</TargetCountry>
  </ServiceListOffering>
</ProviderOffering>
```

Service List Discovery

DVB-I supports two principal approaches to Service List Discovery:

- the client may have one or more built-in or privately provisioned Service List URLs;

- the client may make use of a Service List Registry.

In both cases, a Service List (or Service Lists) may be selected using knowledge of the user's geographical location or language preferences, or by offering the user a choice.

A DVB-I client requires a means to find one or more Service Lists. This is called Service List Discovery.

Service List Registry

A DVB-I Service List Registry is an HTTP endpoint available at a known URL that, if queried, can return a list of Service List Entry Points. The DVB-I Service List Providers who wish to enable the Service List Registry discovery mechanism for their own Service Lists may register their Service List Entry Points in the Service List Registry.

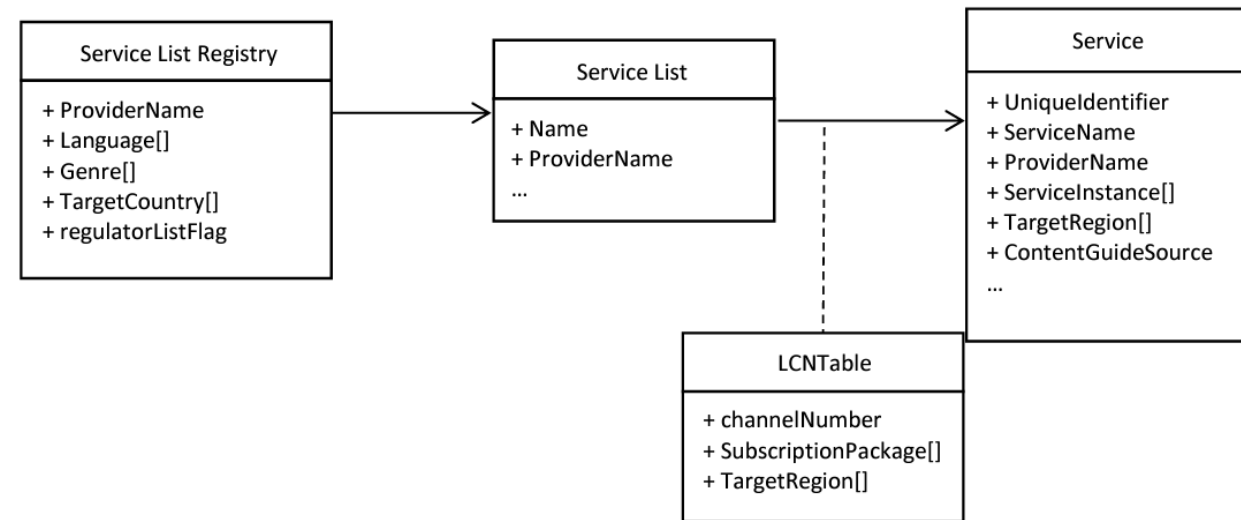**Smart TVs**

Smartphones

HbbTV devices

Infotainment
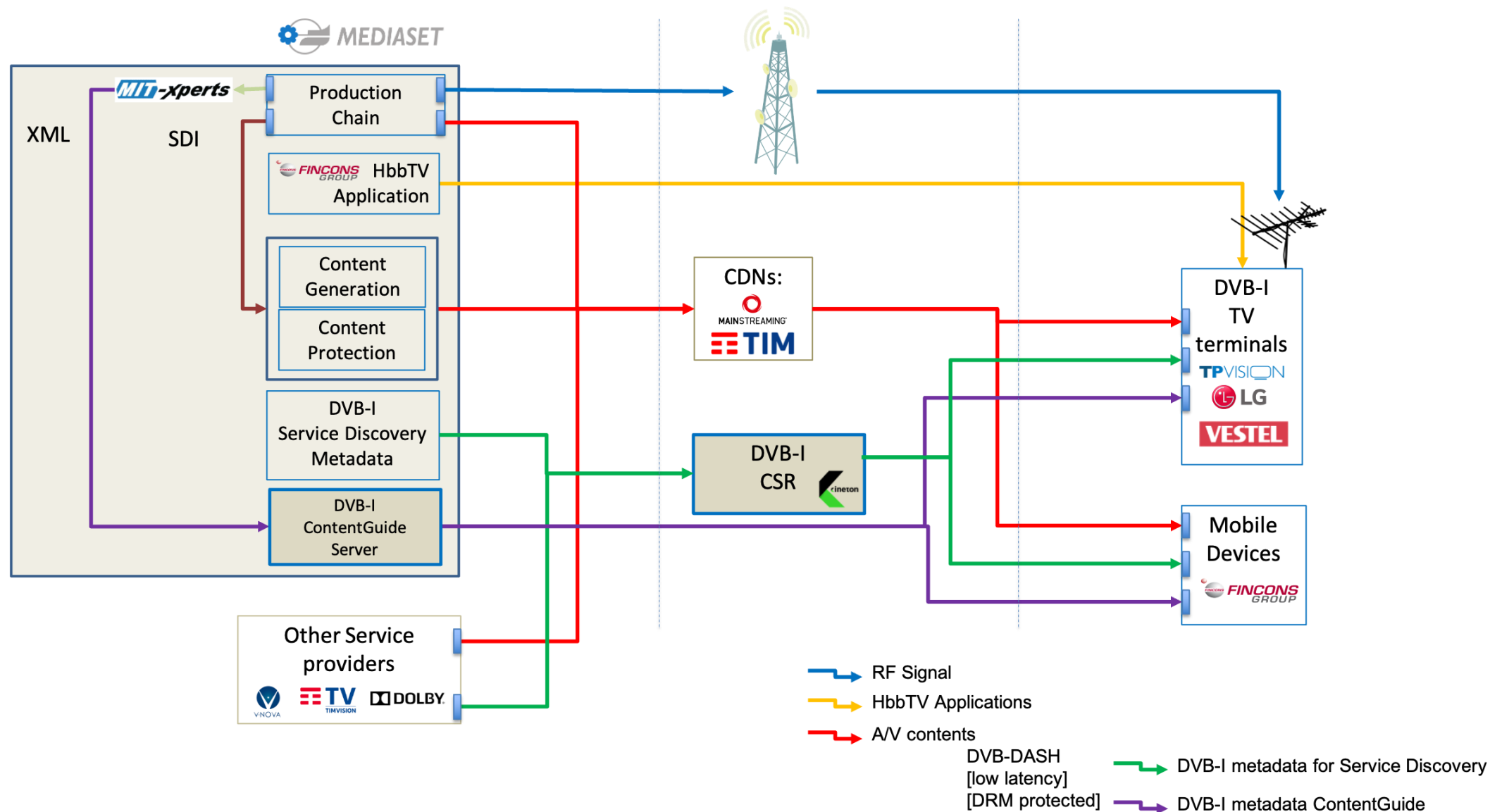
Service List Registry

- A single Service can be listed in many different Service Lists and may have a different channel number in each.

- A Service List can include many different Services.

- A Service List may be discoverable using a Service List Registry and may be listed in several registries.

Central Service Registry (CSR)

For the service list providers, a CMS is available for the management of the service lists. On the basis of the POC realized for Italy, Kineton provides a graphic tool with the following features

User Management

Service Lists Management

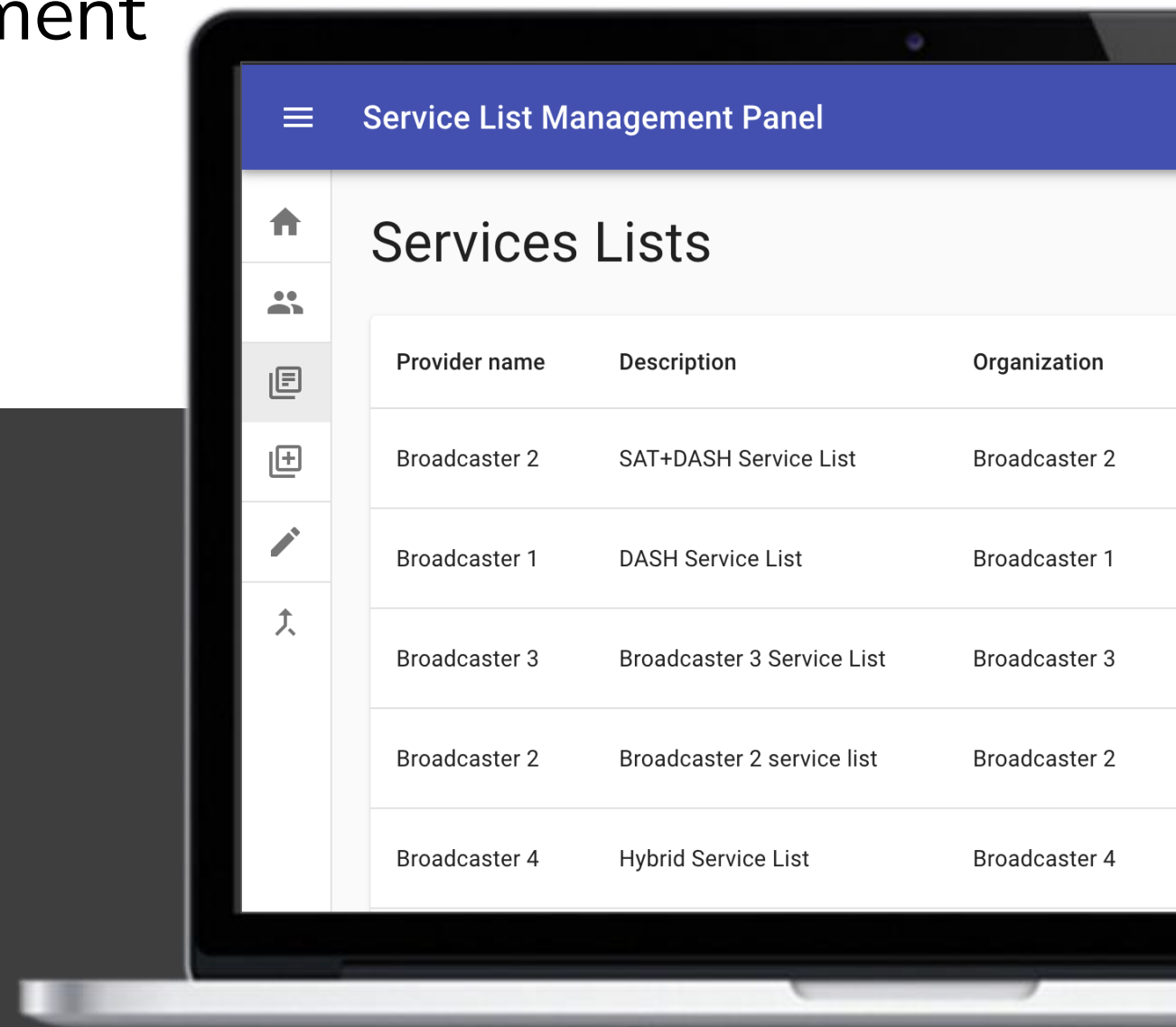**Merging and Publishing**

Service Entry point

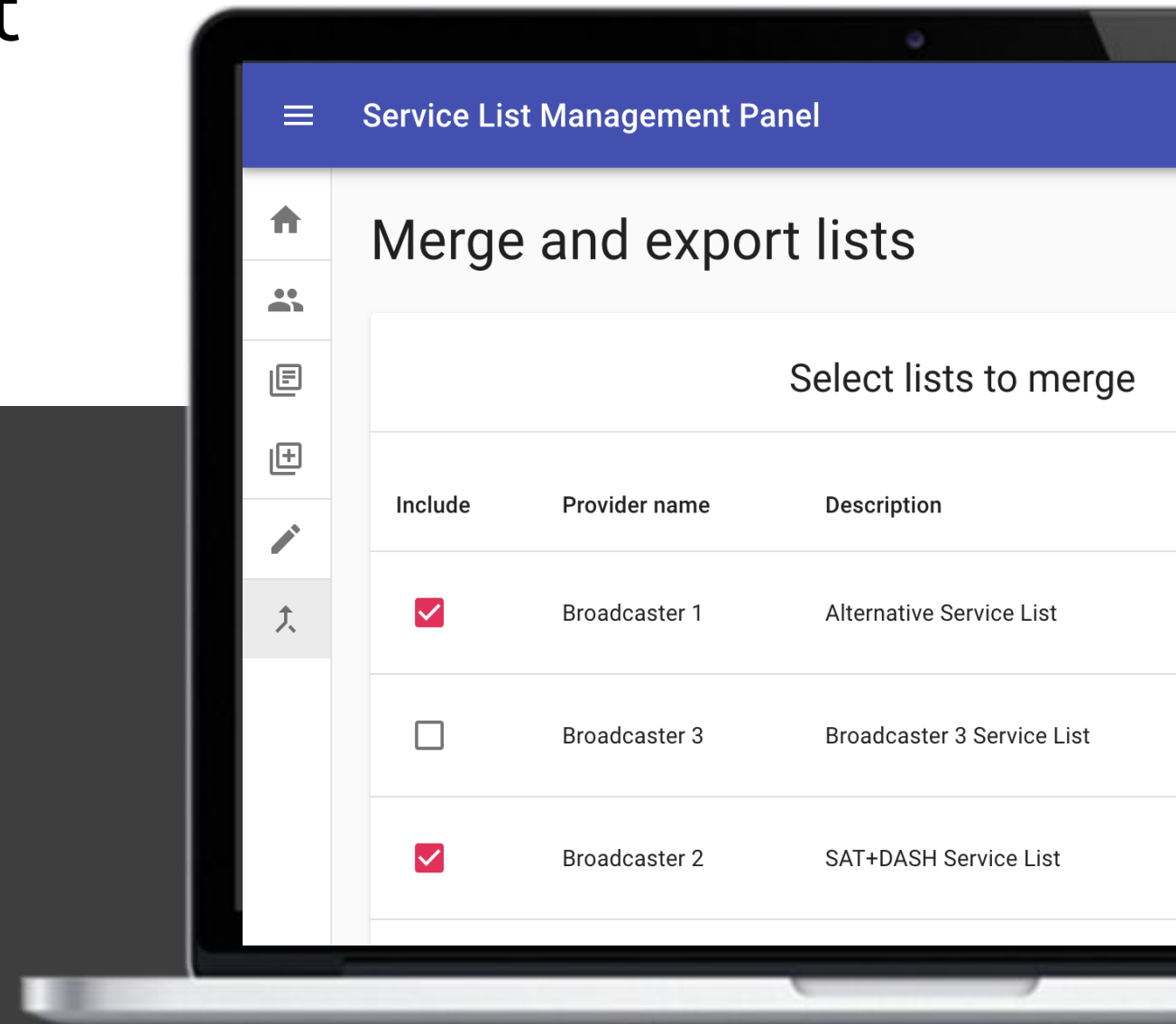**Monitoring**

CSR - Service List Management

In this section you will be able to manage your service lists, allowing you to view, edit and delete them. The user will be able to access the entire history of the service lists for which he has permissions and manage the service list candidate for publication in the production environment.

Service List Management Panel

Services Lists

Provider name	Description	Organization
Broadcaster 2	SAT+DASH Service List	Broadcaster 2
Broadcaster 1	DASH Service List	Broadcaster 1
Broadcaster 3	Broadcaster 3 Service List	Broadcaster 3
Broadcaster 2	Broadcaster 2 service list	Broadcaster 2
Broadcaster 4	Hybrid Service List	Broadcaster 4

CSR - Merge Service List

The user with the role of controlling the CSR, will be able to merge the service lists candidate to the publication. By selecting the various service lists available the user will be able to decide, for each country and type of device, the service list to merge and verify the final result.

Service List Management Panel

Merge and export lists

Select lists to merge

Include	Provider name	Description
☑	Broadcaster 1	Alternative Service List
☐	Broadcaster 3	Broadcaster 3 Service List
☑	Broadcaster 2	SAT+DASH Service List

CSR - Monitoring

The triplets of each services may change over time due to mux configurations. These changes must also be reported in the CSR to update the service lists.

THANK YOU

10th HbbTV Symposium