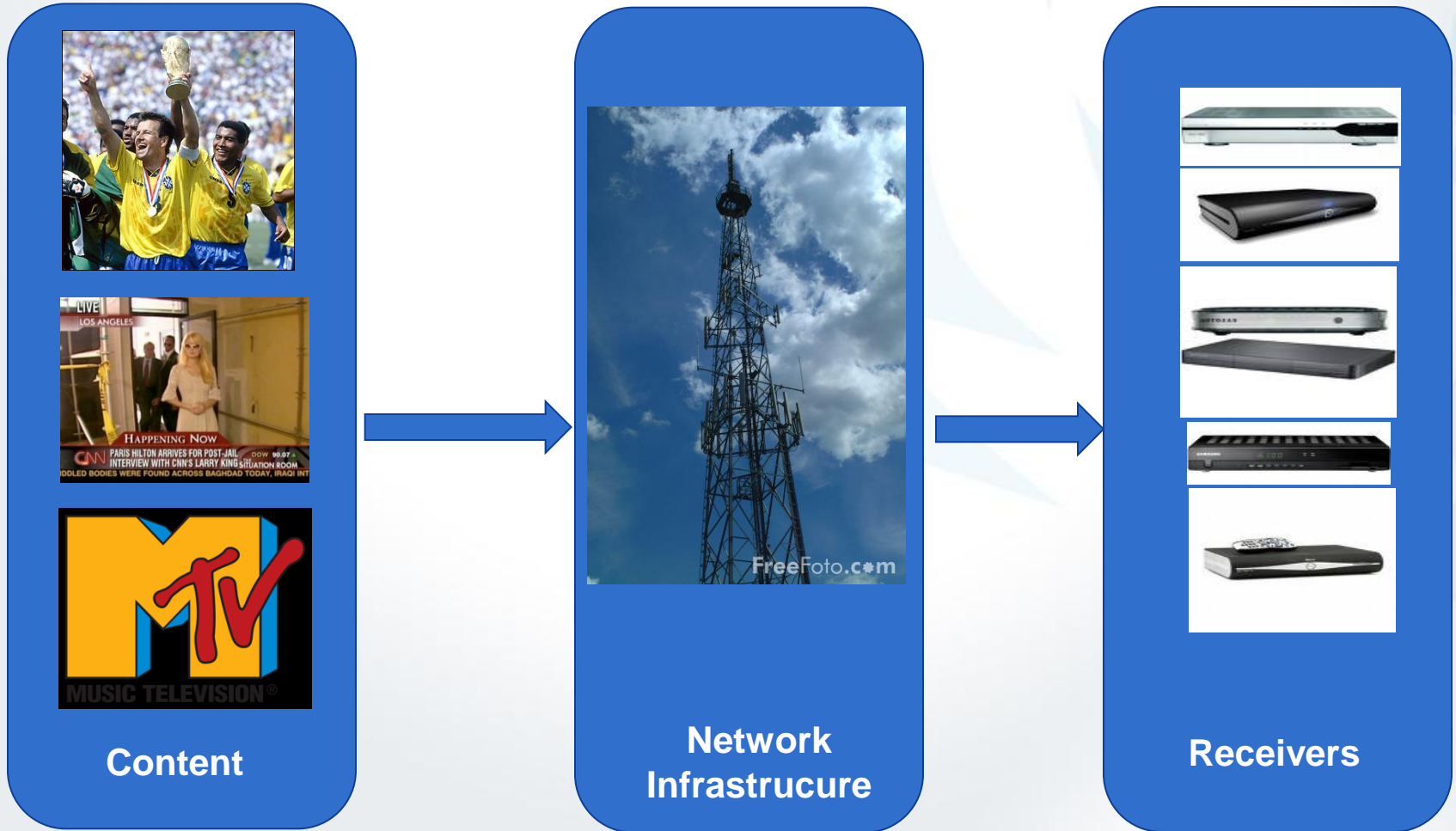


Digital Receiver Planning



www.digitaltv-labs.com





Ensuring a good consumer experience



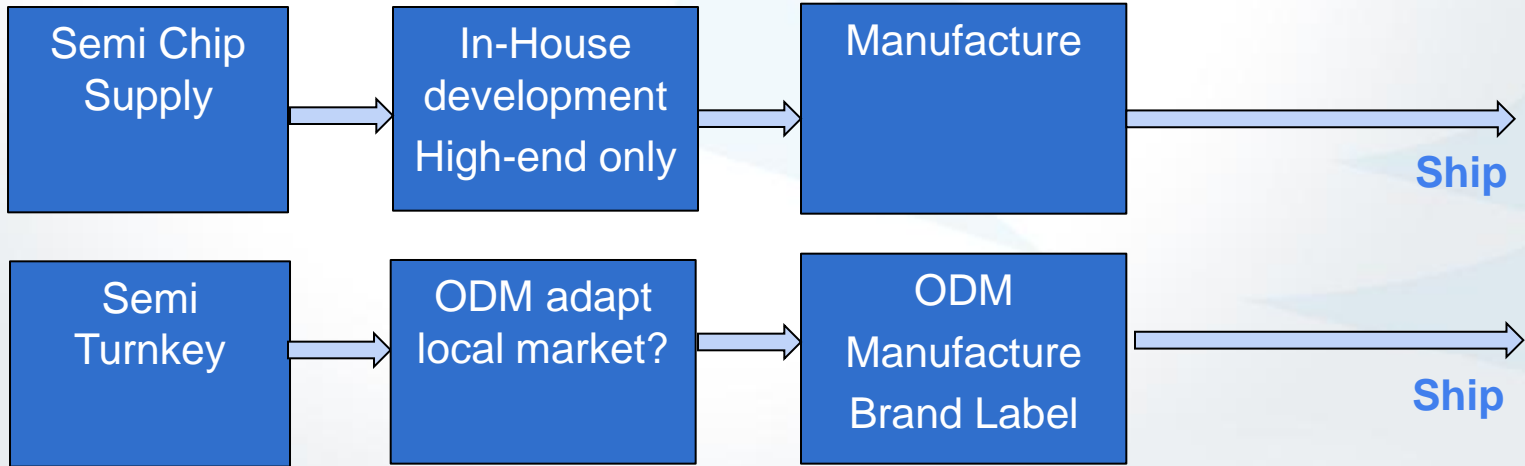
- **Choice of receivers**
- **Low cost**
- **Easy to use**
- **Supports local language**
- **Access expected channels**
- **Picture and audio quality**
- **Responsive**
- **Interactive applications work (e.g. info services)**
- **Reliable**
- **Supports new services and network changes**



China
STB
Makers



iDTV
Makers



- **STB Makers tiny margins means minimal testing**
- **Small markets get other market products**



- **Key Issue: Small, fragmented markets**
- **Suggestion:**
 - **Choose a common transmission standard**
 - **Have a receiver specification**
 - **Decide if to and how to regulate receiver market**

 Anguilla	 Antigua and Barbuda	 Aruba	 Bahamas
 Barbados	 Belize	 Costa Rica	 Cuba
 Dominica	 Dominican Republic	 El Salvador	 Grenada
 Guadeloupe	 Guatemala	 Haiti	 Honduras
 Jamaica	 Martinique	 Montserrat	 Netherlands Antilles
 Nicaragua	 Panama	 Puerto Rico	 Saint Kitts and Nevis
 Saint Lucia	 Trinidad and Tobago	 Virgin Islands	



- DVB is a toolbox -many different options
- Each country has a profile
- DVB-T2 huge matrix of transmission parameters
- PSI/SI (data signalling to receiver) big variation
- Spec should be fit for purpose

Profile
Country
A

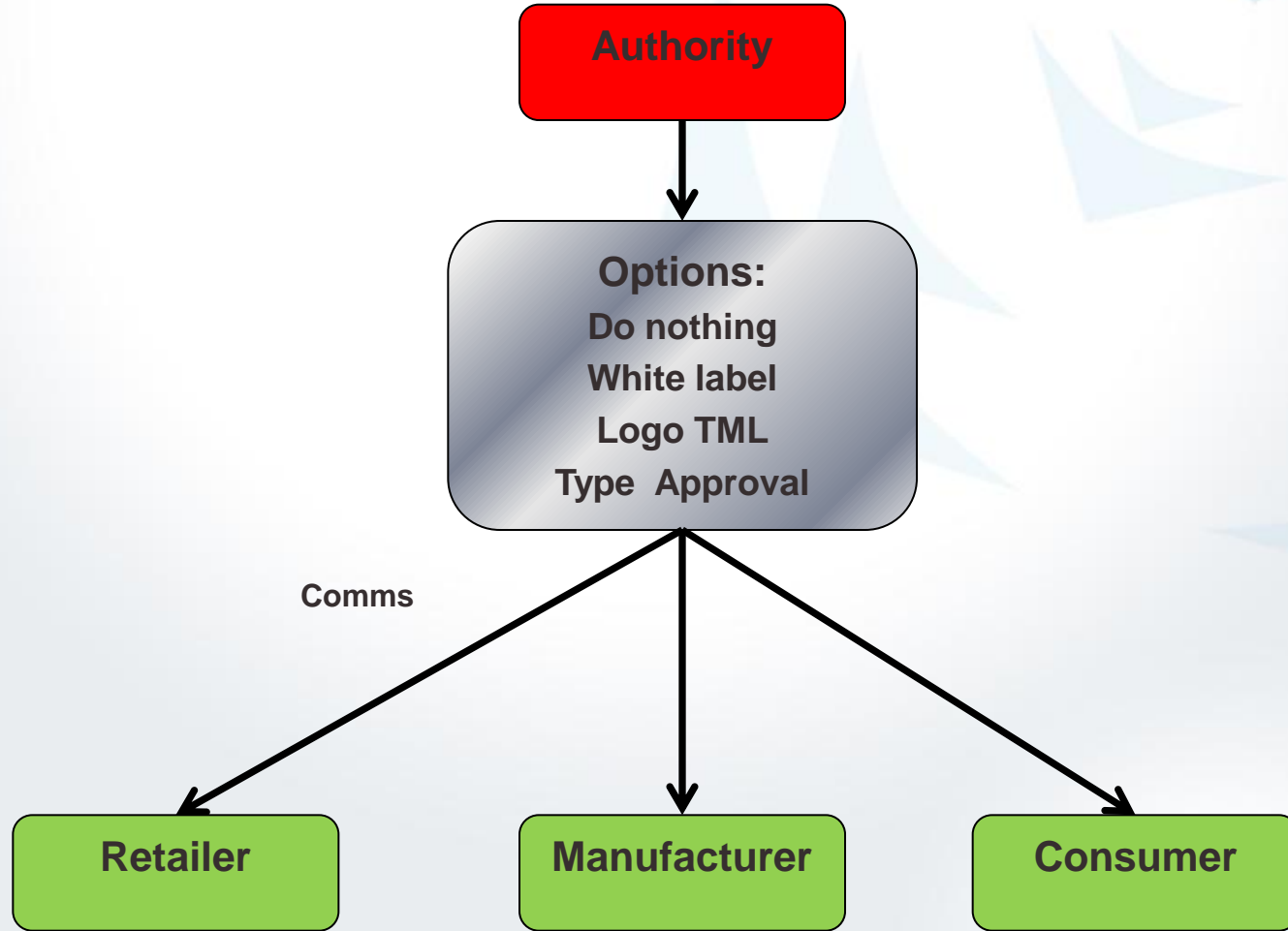
Profile
Country
B

Profile
Country
C

Profile
Country
D

DVB T2®





Service Presentation

Time

Audio/Video

Service Signalling

RF Front-End

Input/Output

EMC -Safety

Live Network

IP Connectivity

Conditional Access

Over-Air Download

Service and Network Update



EPG

Interactive Engine

UI

Language Support



**Option 1:
Low Effort**



**Do
Minimum**

**Free uncontrolled
market**

Receiver issues in field
Platform brand damage
Risk to new services
Low cost
Lots of receivers

**Option 2:
Risk**



Self-Cert

**Manufacturer certifies
they conform to spec**

Manufacturer push
Relies on honesty
Marking own homework
Needs a test suite
Audit process

**Option 3:
Full Control**



**Test
Centre**

**Manufacturer submits
receiver to test lab**

Set-up or outsource
Ensures quality
Costs involved
Platform upgrades
Good user experience



- **UK –MHEG Big Brother application fail - £1000's lost**
- **UK –Pay TV introduction broke lots of Freeview receivers**
- **Poland –EAC3 introduction causes issues**
- **France –Split NIT table breaks legacy receivers**
- **Denmark –Subtitling fail**
- **LTE 4G channel 69 overloads many TV tuners (BBC tests)**
- **Kenya still selling DVB-T receivers in DVB-T2 market**
- **France –receivers failure on triple offsets**
- **EU-wide incorrect channel list due to border issues**



- Caribbean is unique –unique approach
- Consider a common transmission and receiver specification
- Consider a receiver regulation policy
- Communicate
- Learn and adapt from other experiences
- Use specialist expertise available

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