

From PIS to Multimedia Services: Standards and Market Trends



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A - Multimedia Services from Use Cases

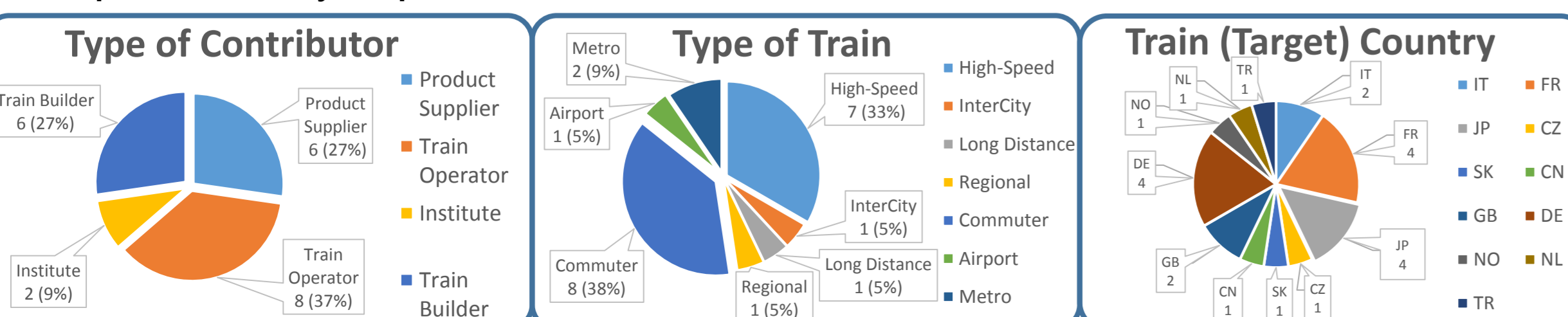
Services are grouped in four main categories:

Category	Description
Group A	Visual plus Audio PA Information and Intercom Calls
Group B	Personal Infotainment
Group C	Video Surveillance / CCTV
Group D	Others

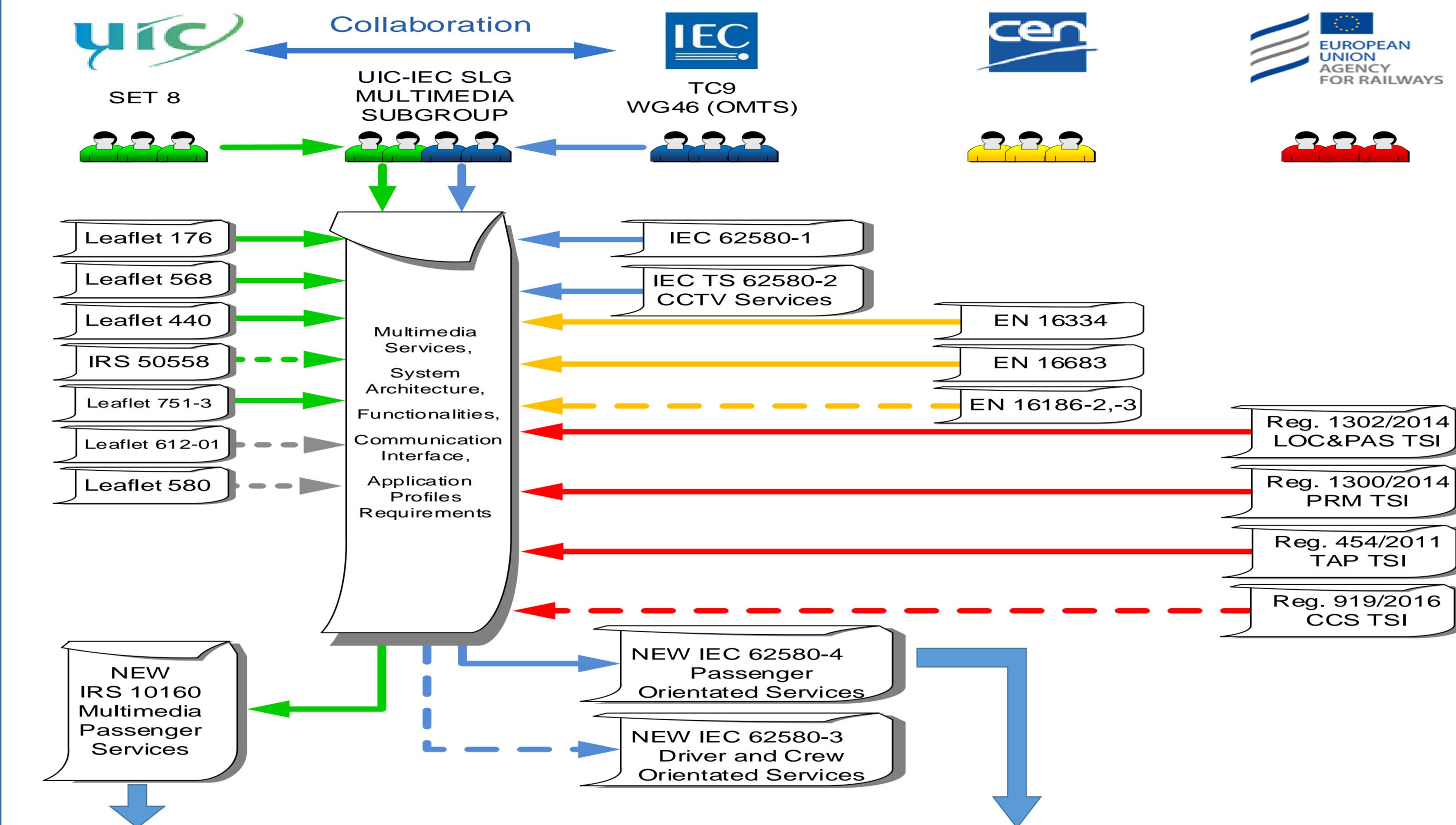
Detailed list of Services (S) and Subservices (SS) with results collected from 21 Use Cases supplied by railway operators, train builders, system integrators and product manufacturers:

S	SS	Service	Category	Results from Use Cases
1		Visual PA Information outside the train	Group A	20
2		Visual PA Information inside the train	Group A	21
3		Audio PA Information outside the train	Group A	9
4		Audio PA Information inside the train	Group A	21
5		Passenger Intercom Call	Group A	17
6		Train Staff Intercom Call	Group A	18
7		Passenger Infotainment on passenger own device with Wireless connection	Group B	16 + 2*
	7A	Information	Group B	11 + 2*
	7B	Entertainment	Group B	6 + 2*
	7C	Internet	Group B	15 + 2*
8		Seat Infotainment	Group B	3
	8A	Information	Group B	3
	8B	Entertainment	Group B	3
	8C	Internet	Group B	2
9		Interactive Infotainment Kiosk	Group B	1 + 1*
10		Internal Passenger Video Surveillance/CCTV	Group C	18 + 1*
11		External Side View Video Surveillance/CCTV	Group C	9
12		External Front and Rear View Video Surveillance/CCTV	Group C	6 + 4*
13		Internal Video Surveillance/CCTV for train staff areas	Group C	3
14		Pantograph Video Surveillance/CCTV	Group C	5
15		External Platform Video Surveillance/CCTV	Group C	4
16		Passenger Counting	Group D	7
17		Seat Reservation	Group D	5 + 2*
18		Improvement of Audio and Data Mobile Communication	Group D	4 + 4*
19		Blind People Audio Beacon	Group A	2
19A		Local PA Announcement	Group A	3
19B		Door Guidance	Group A	3
20		Coach Occupancy	Group A	1
21		Hearing Impaired People Support	Group A	0
21A		PA Announcement	Group A	0
21B		Passenger Intercom Call	Group A	0

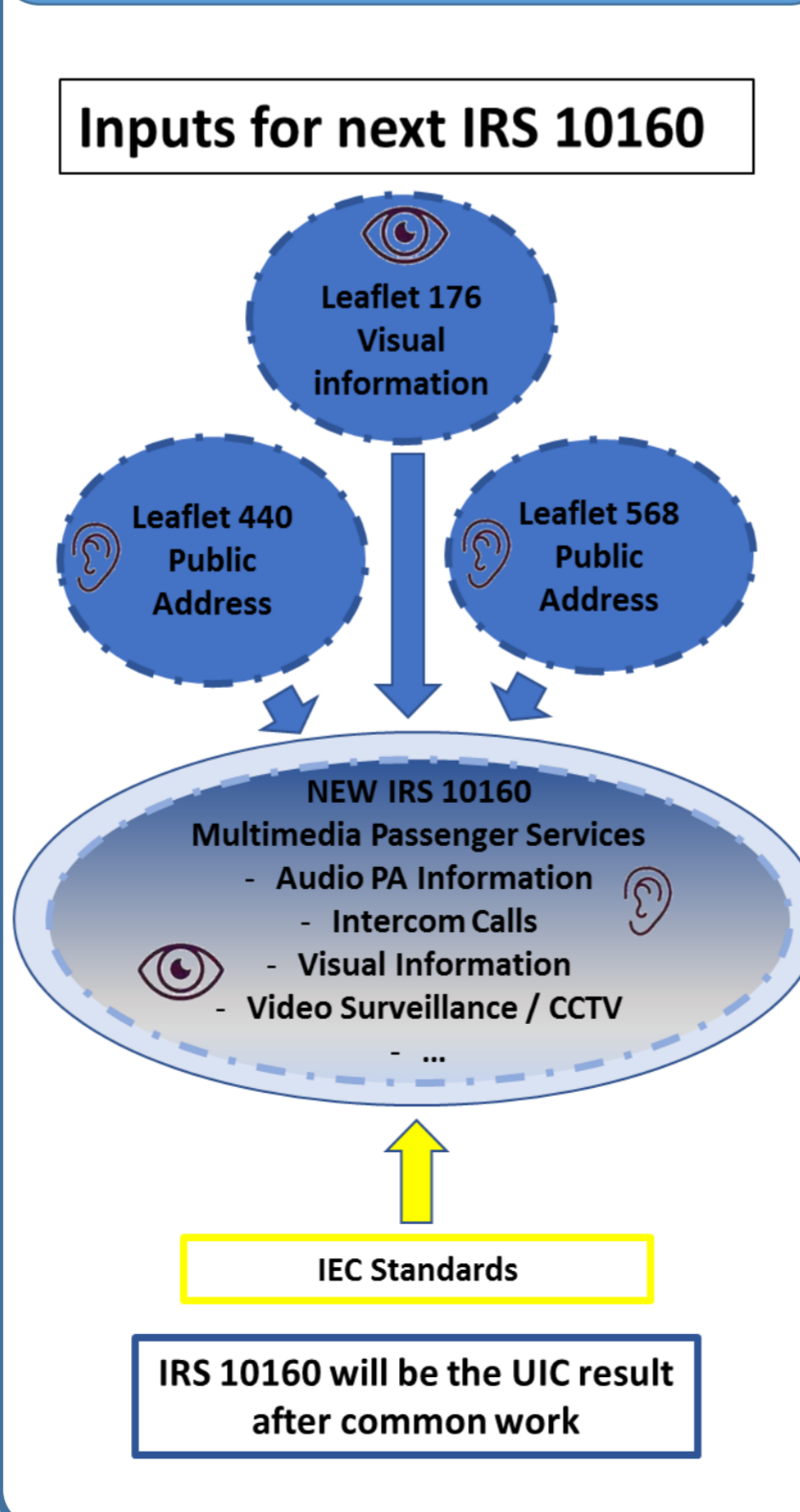
* = planned, but not yet implemented.



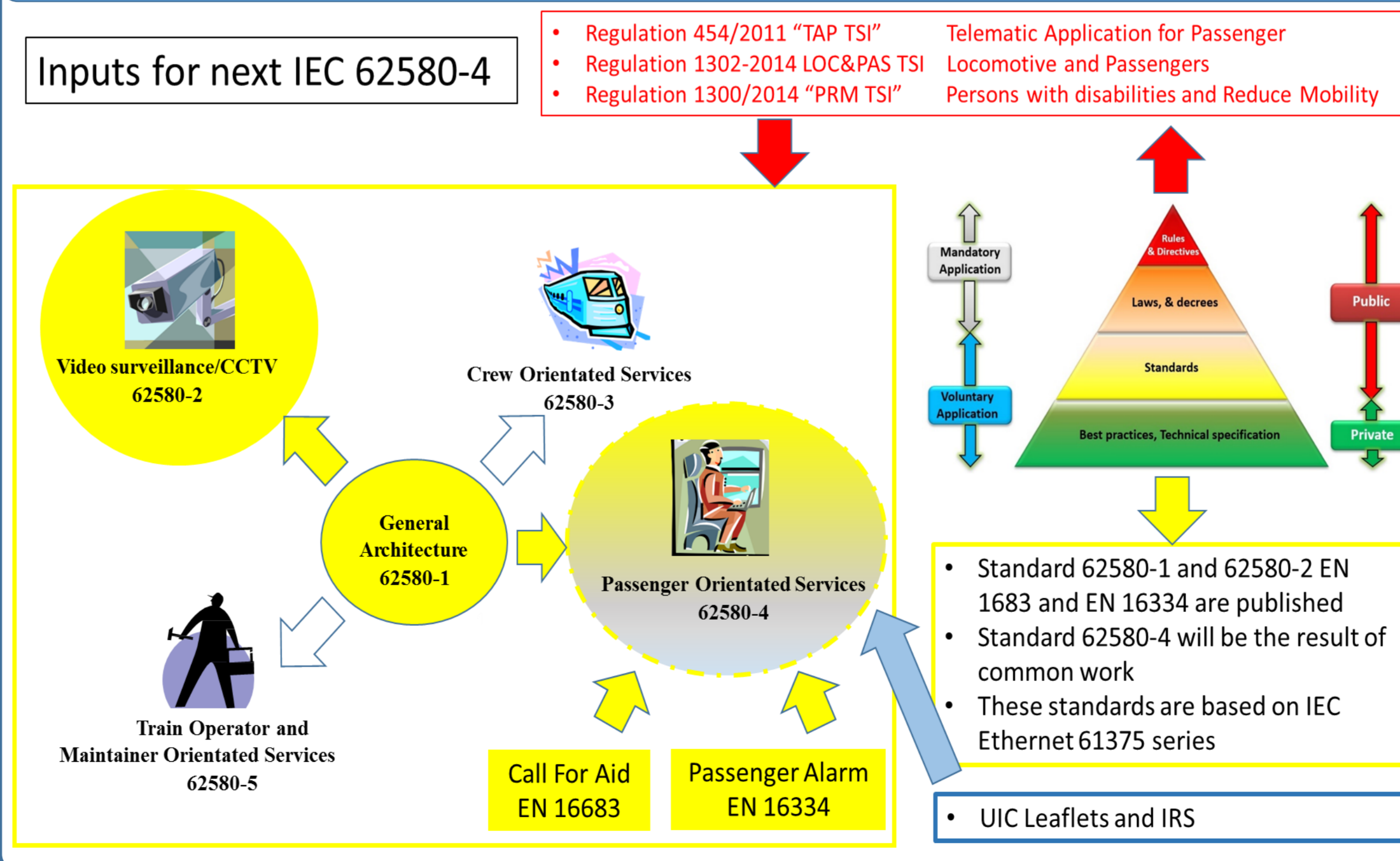
B - Existing and Future Multimedia Standards



B1 - NEW IRS 10160



B2 - NEW IEC 62580-4



C - Safety and Security related Services

Safety Related Functionalities for Services 4, 5 and 6:

Audio PA: The driver or the conductor should be able to broadcast emergency message in case of hazardous events.

Intercom Call: The passenger should be able to communicate with the staff even in case of hazardous events.

Security Related Functionalities for Services 10, 11 and 12:

CCTV: The data should not be corrupted otherwise the function cannot be ensured with a possible impact on safety (side view camera for example) or on judicial investigation (CCTV).

Data is encrypted and recorded in order to maintain confidentiality. Dedicated tools are needed to decrypt. Detailed list of Services (S) and Subservices (SS) with results collected from 21 Use Cases supplied by railway operators, train builders and system integrators.

D - Next Steps

- ❑ Complete UIC-IEC Multimedia Joint Document
- ❑ Collect NEW Use Cases
- ❑ Verify possible collaborations with ITxPT
- ❑ Restart activities inside IEC TC9 WG46 to develop NEW IEC 62580-4
- ❑ Develop NEW IRS 10160

New active members are welcome!

