

November 6th, 2019

DAB/DAB+ study H1 2019

Digital Radio Trend Analysis

WorldDAB General Assembly 2019

Steven Nagels



OUR KNOWLEDGE IS YOUR **POWER**

JATO Dynamics Ltd.

Who are we?

- Founded in 1984
- World's most timely, accurate and up-to-date information on vehicle specifications and pricing, sales and registrations, news and incentives.
- Represented in 50 countries
- Unique local market expertise
- Intelligence used by OEM, Leasing Companies, Consumer Web Portals

- **Accuracy** – high quality and precise market information
- **Timeliness** – prompt response to market events
- **Completeness** – all information our customers require

JATO Dynamics Ltd.

Methodology

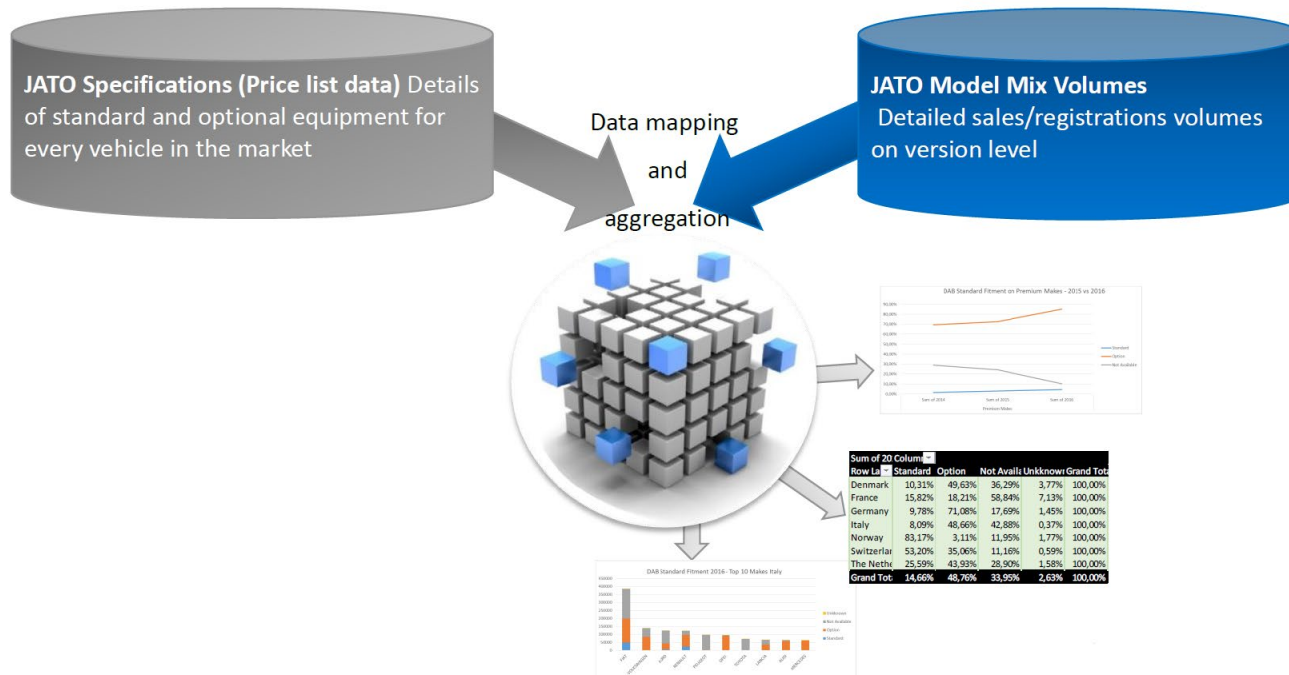
JATO Specifications Database

- All prices & equipment as offered by each manufacturer in a specific market.
- Sourced from official sources.

JATO Modelmix & Volumes

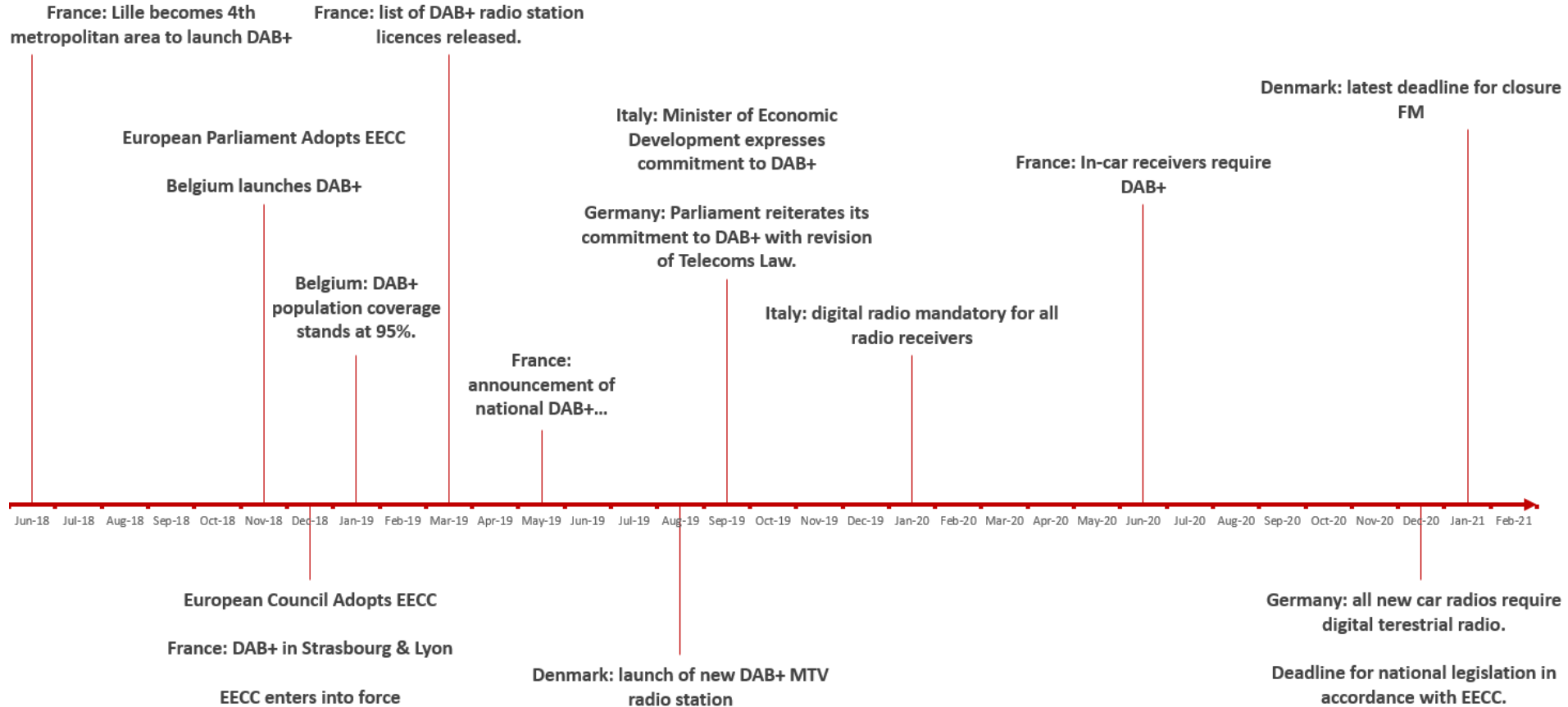
- Sales per market
- Separate build
- Sourced from official sources.

Combination of both: exact number of car sales per country, with insight into standard and optional equipment.



DIGITAL RADIO TREND ANALYSIS

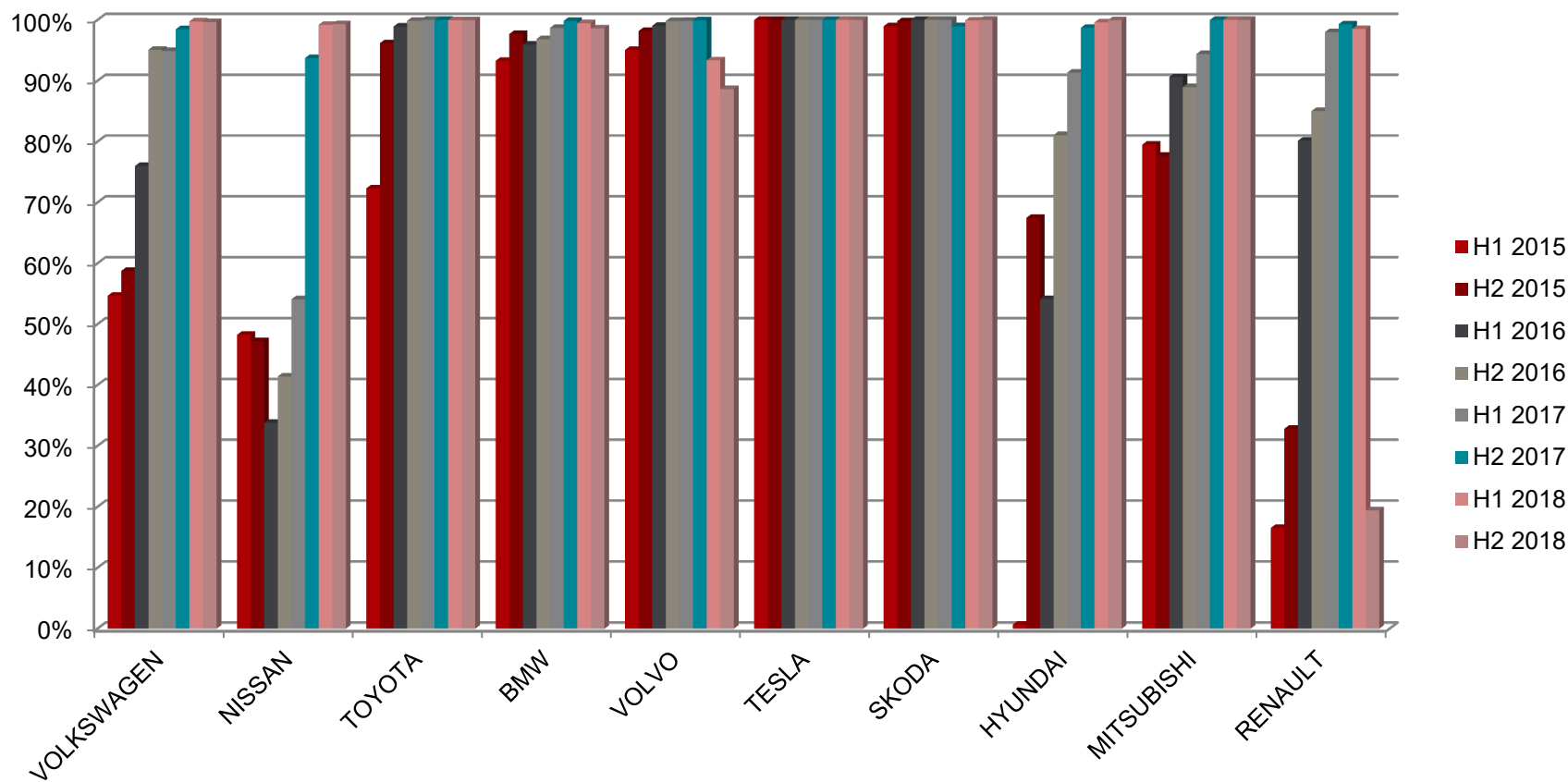
Timeline



DIGITAL RADIO TREND ANALYSIS

Norway

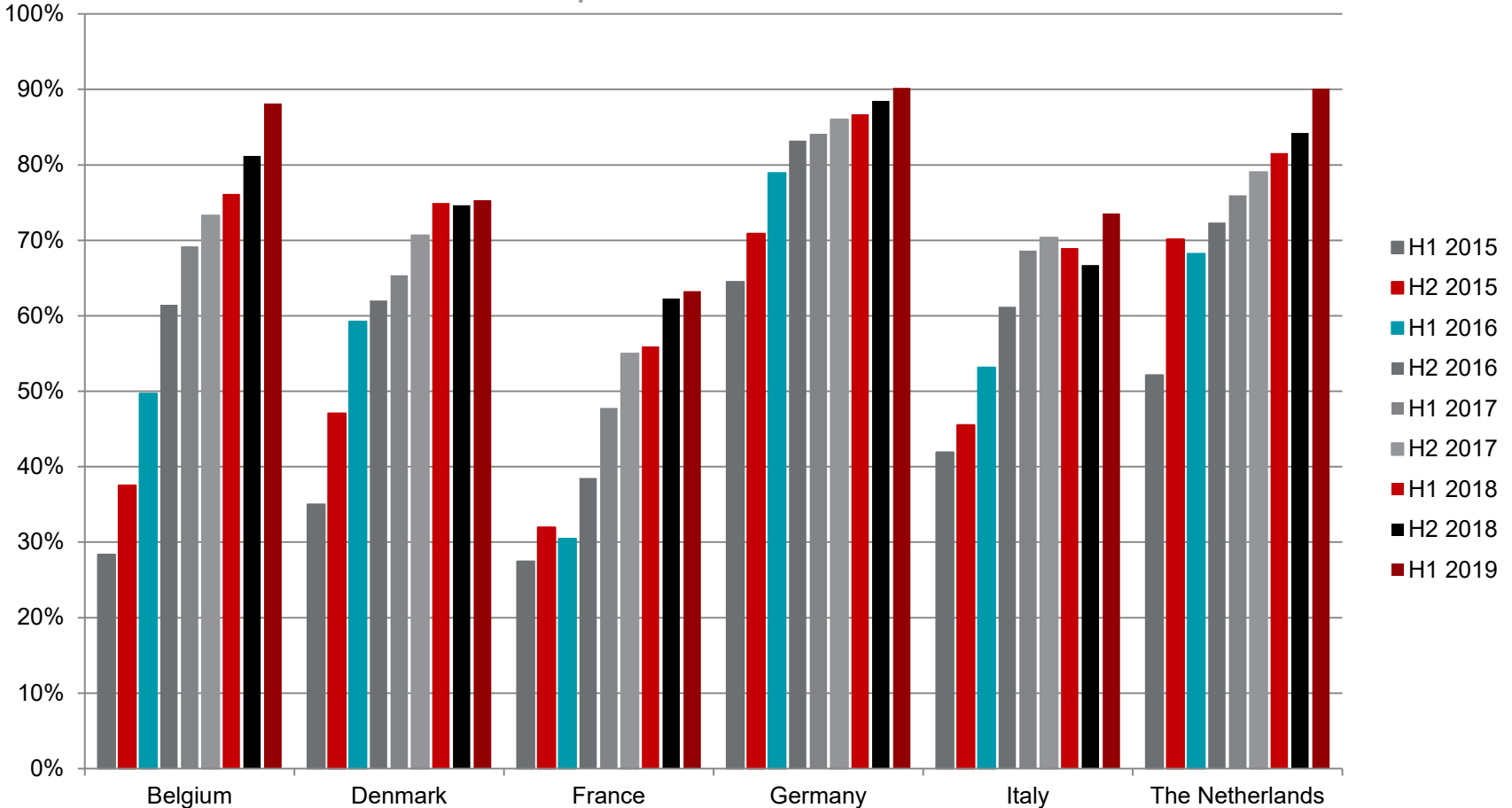
DAB standard and available as option (2018)



DIGITAL RADIO TREND ANALYSIS

Full market trend availability

DAB standard and available as option.

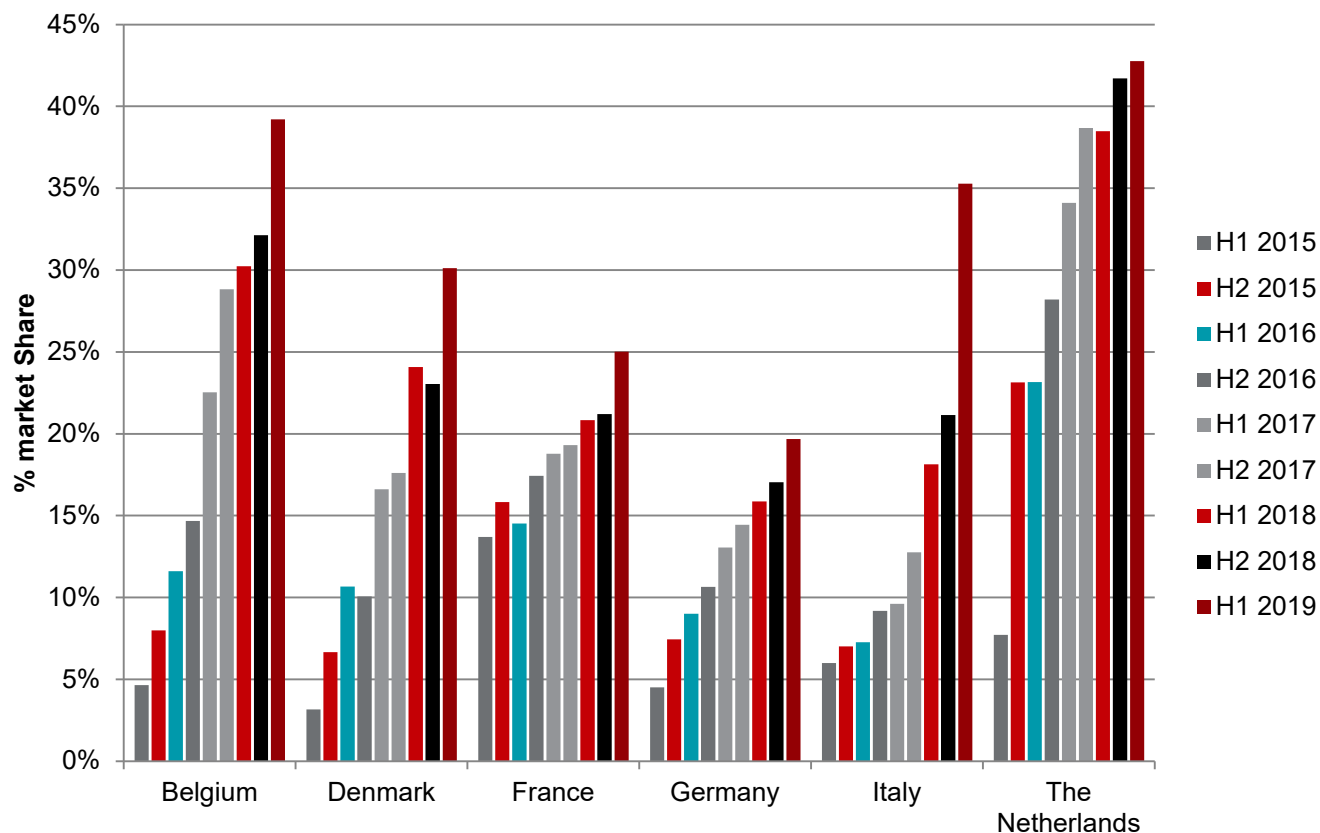


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DAB as standard fitment

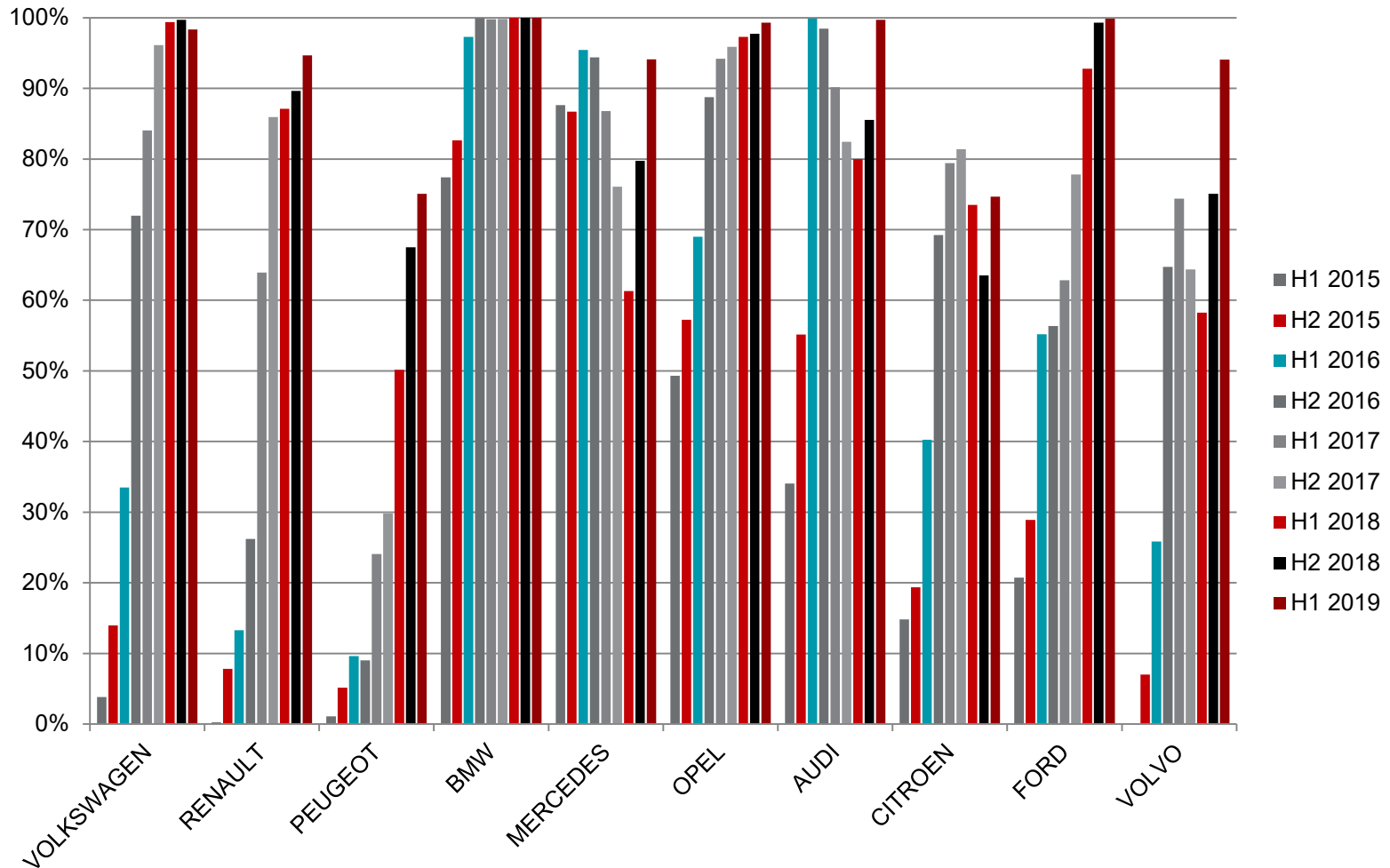
DAB/DAB+ as standard fitment

| | H1 2015 | H2 2015 | H1 2016 | H2 2016 | H1 2017 | H2 2017 | H1 2018 | H2 2018 | H1 2019 |
|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Belgium | 13419 | 16999 | 35911 | 33755 | 72641 | 64666 | 100220 | 70114 | 121729 |
| Denmark | 3316 | 6842 | 12472 | 10670 | 20600 | 17266 | 29164 | 22578 | 36961 |
| France | 139295 | 142396 | 160068 | 158581 | 212313 | 187608 | 246458 | 207884 | 289554 |
| Germany | 73063 | 118156 | 156022 | 172158 | 233221 | 238796 | 291935 | 272035 | 363902 |
| Italy | 52732 | 49845 | 75739 | 71732 | 109225 | 106277 | 203587 | 166865 | 382729 |
| The Netherlands | 15669 | 57574 | 45126 | 53454 | 77213 | 73439 | 98281 | 81155 | 97960 |
| Grand Total | 297494 | 391812 | 485338 | 500350 | 725213 | 688052 | 969645 | 820631 | 1292835 |



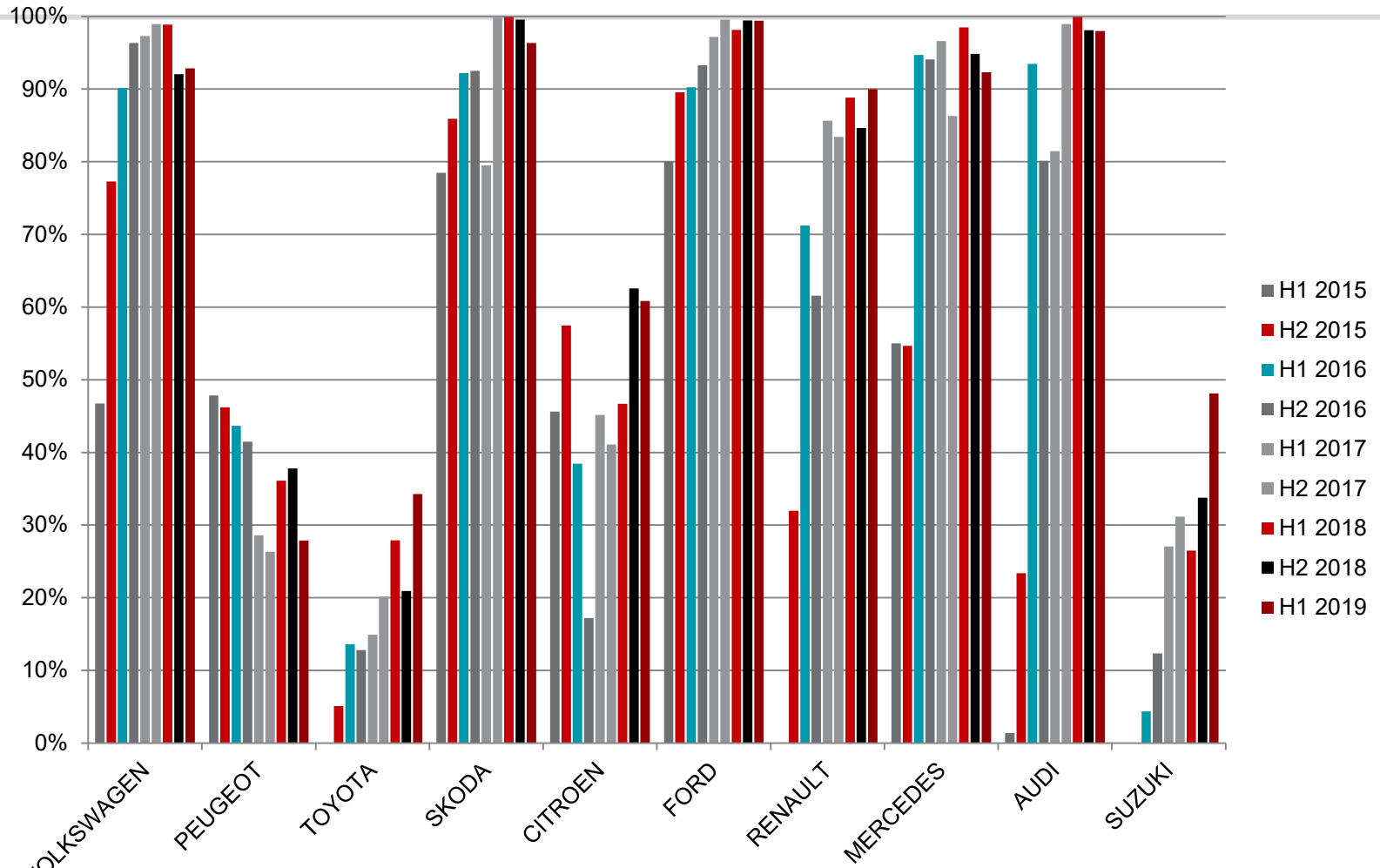
DIGITAL RADIO TREND ANALYSIS

Belgium: DAB standard in top 10 sold cars



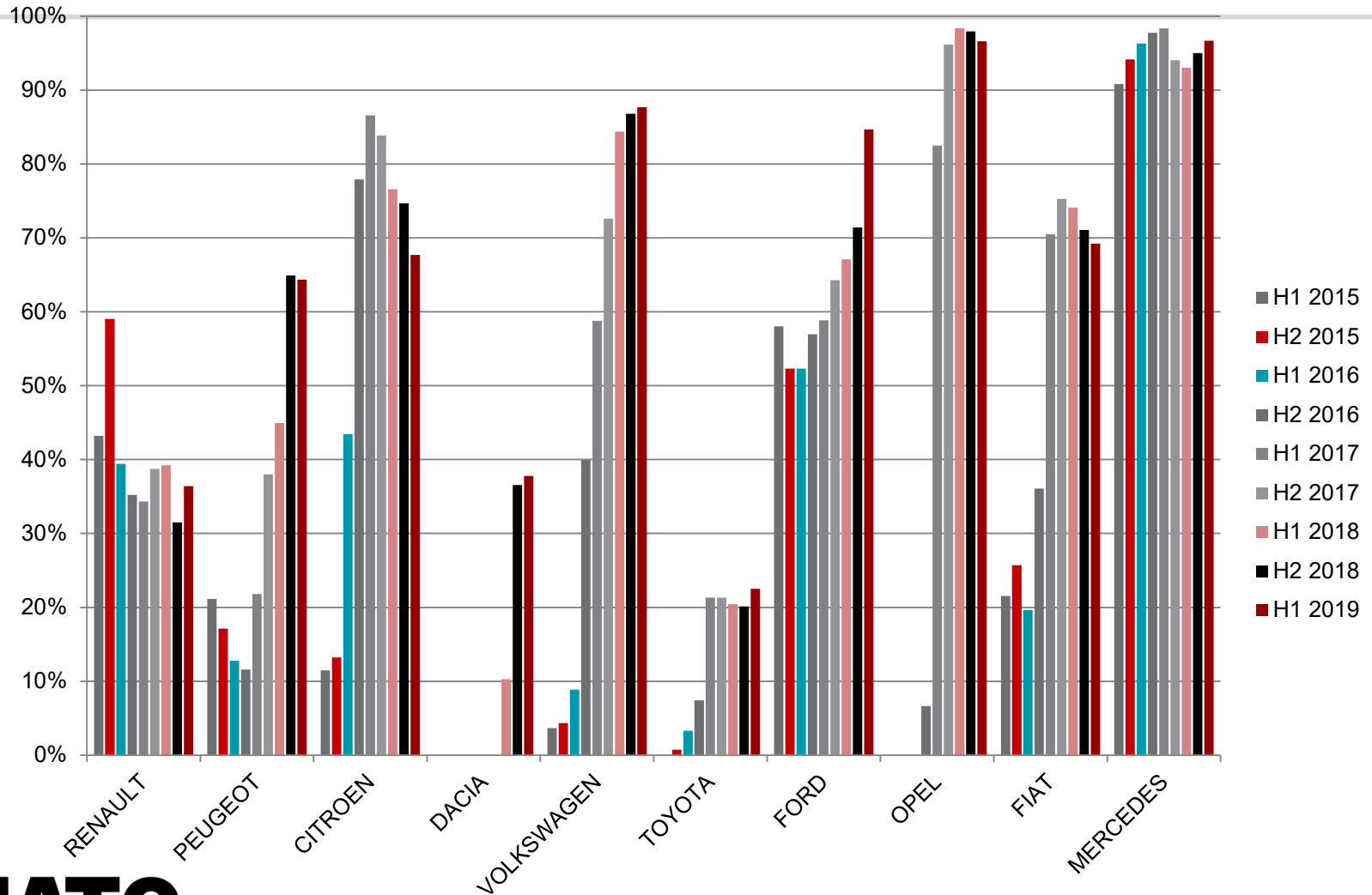
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Denmark: DAB standard in top 10 sold cars



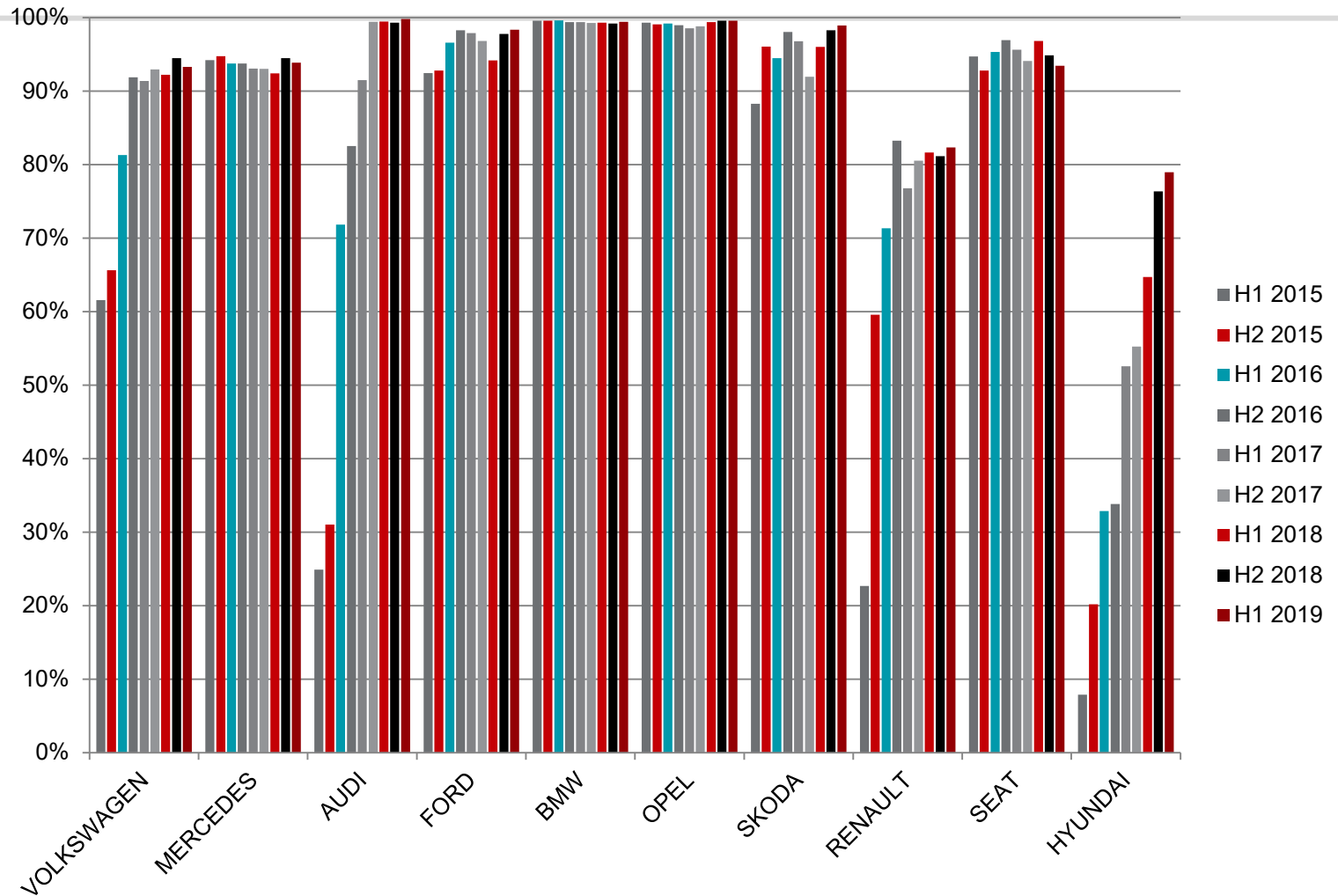
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France: DAB standard in top 10 sold cars



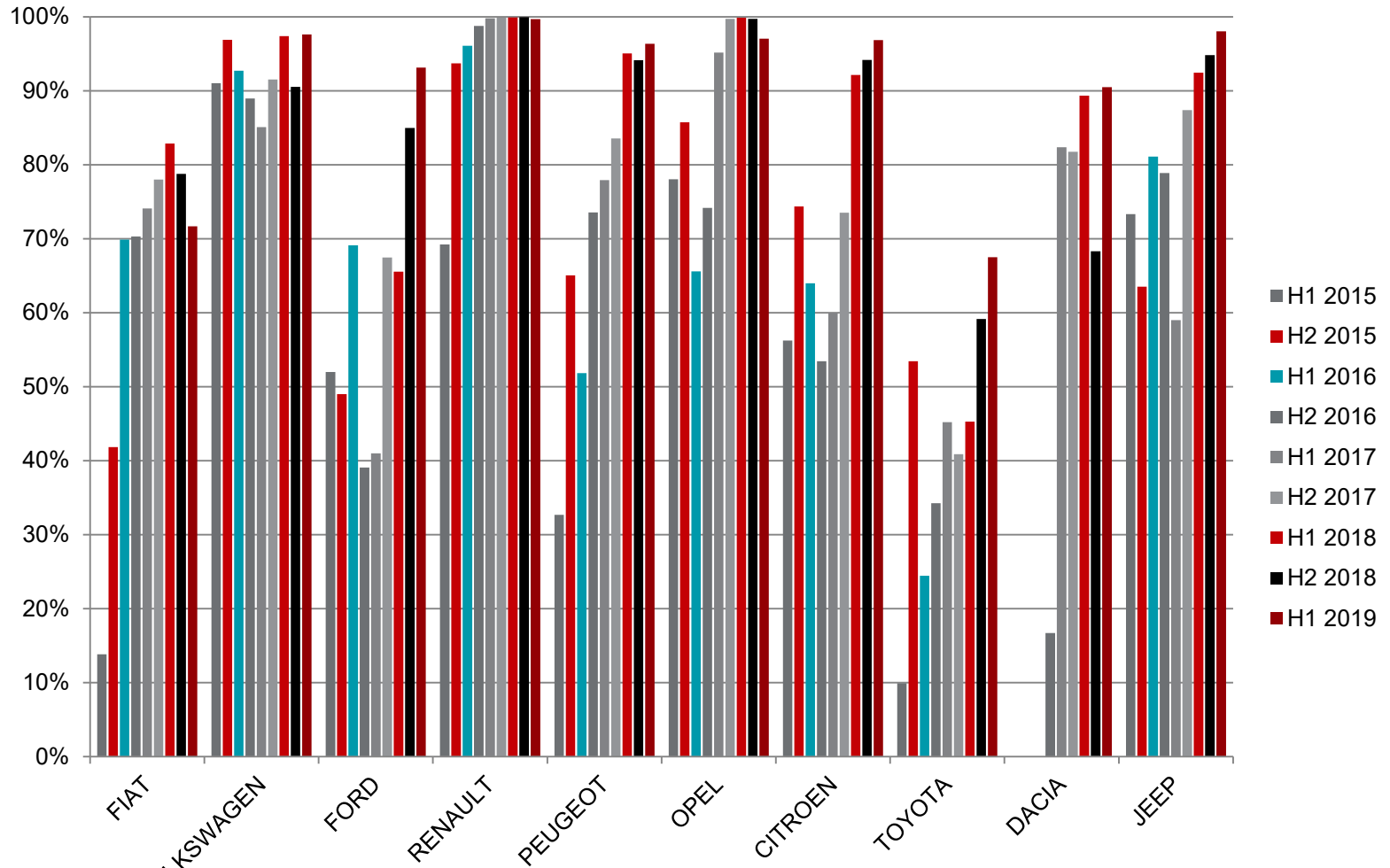
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Germany: DAB standard in top 10 sold cars



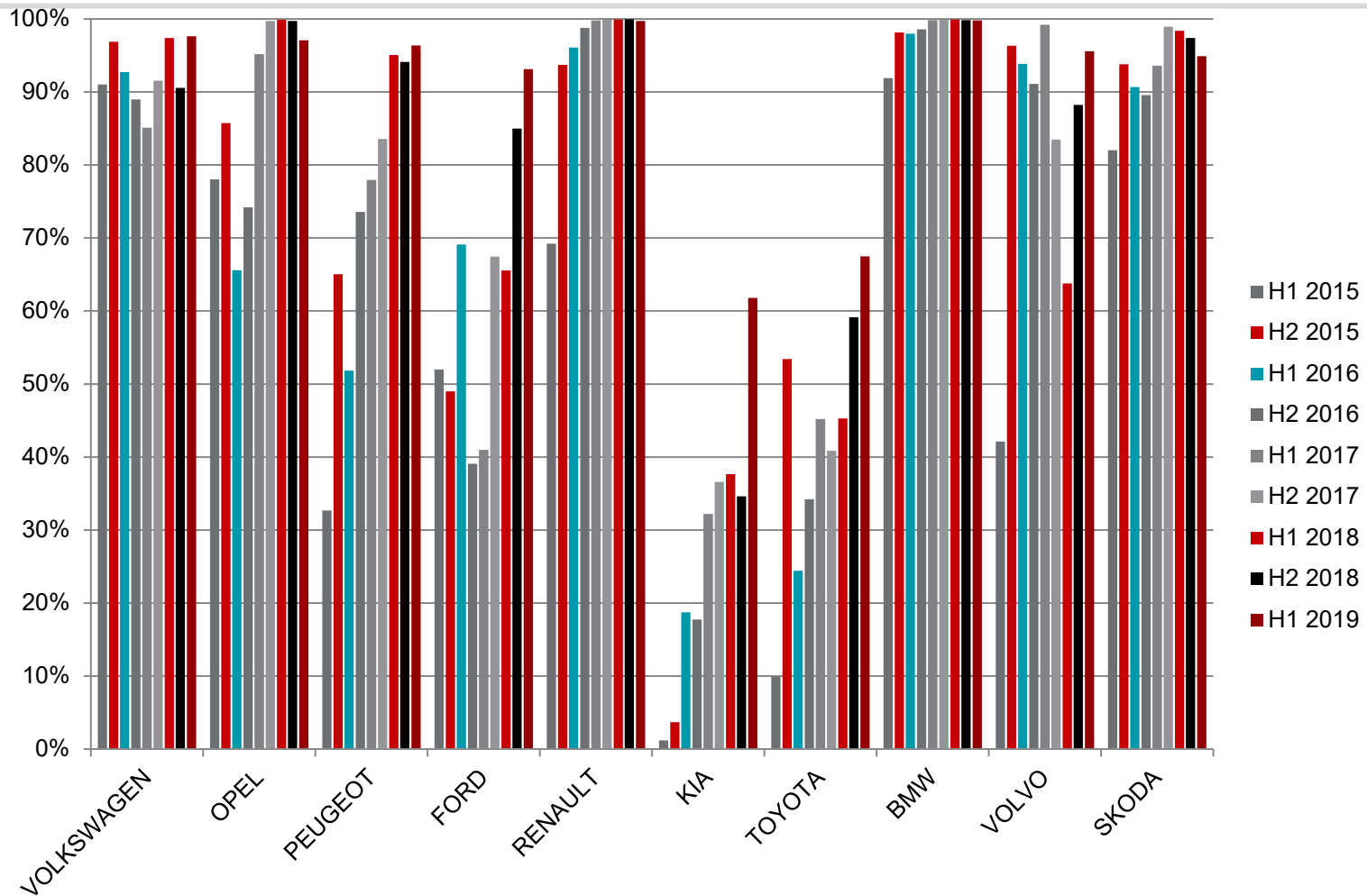
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Italy: DAB standard in top 10 sold cars



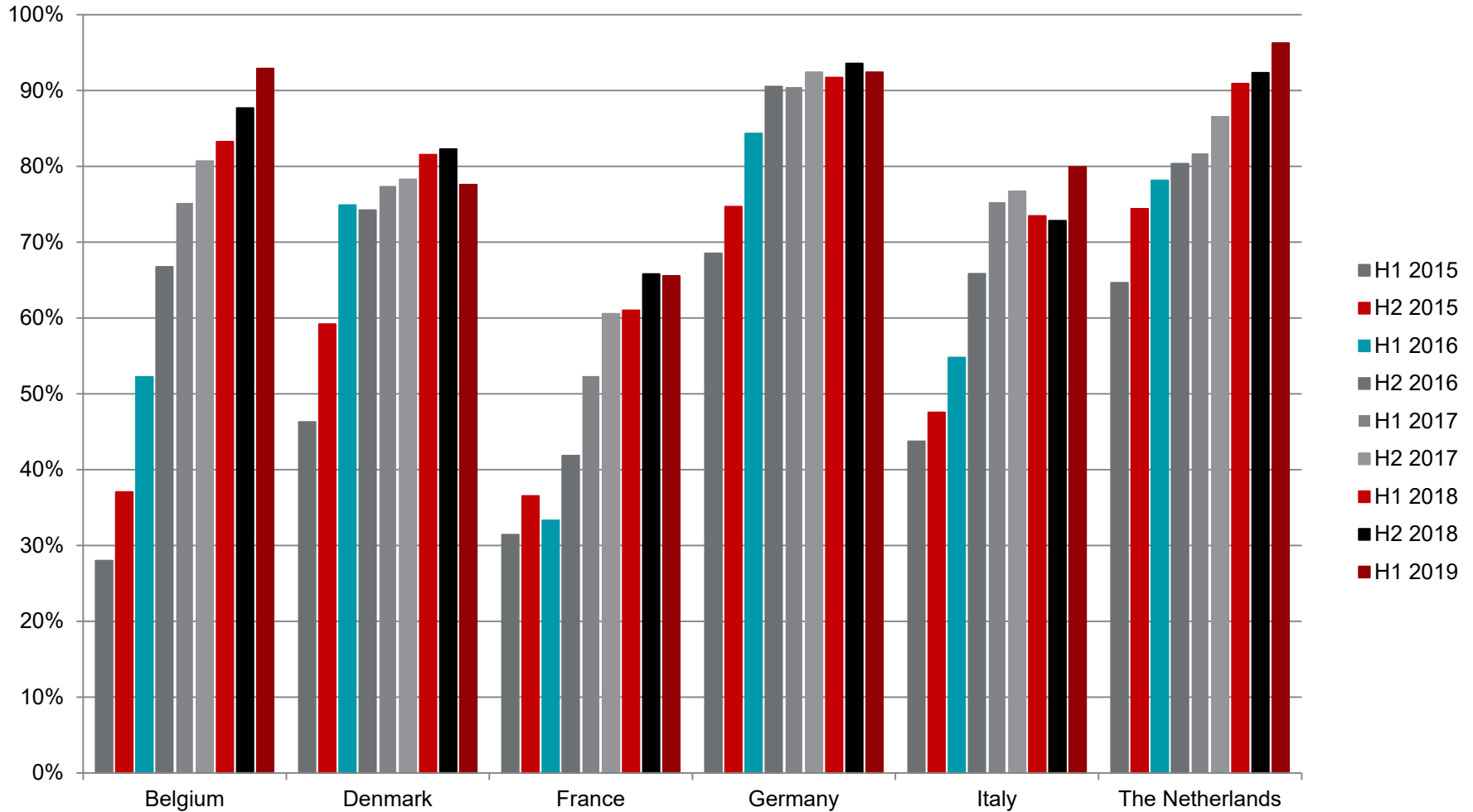
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The Netherlands: DAB standard in top 10 sold cars



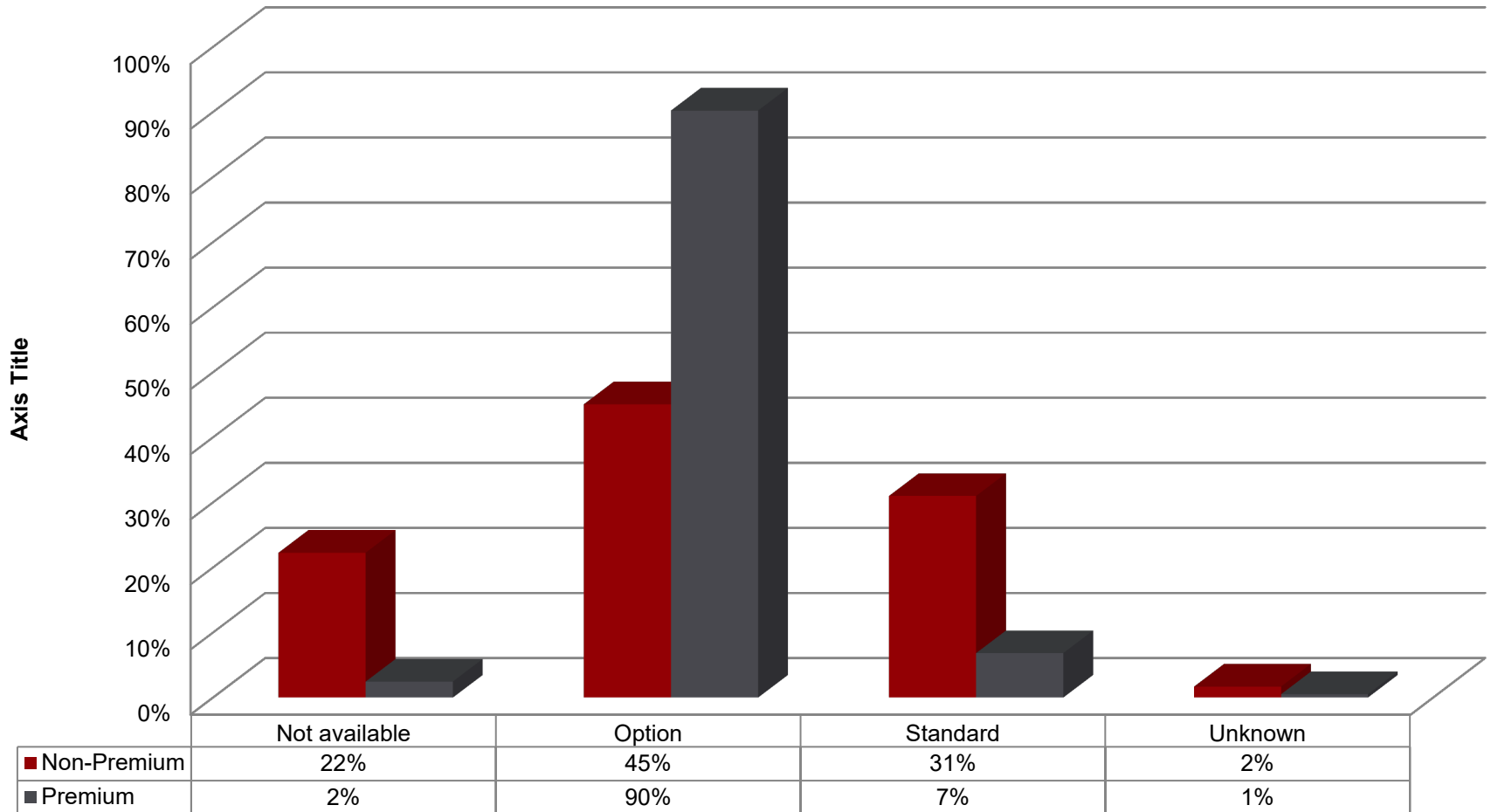
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Full Market Trend: DAB standard in top 10 sold cars



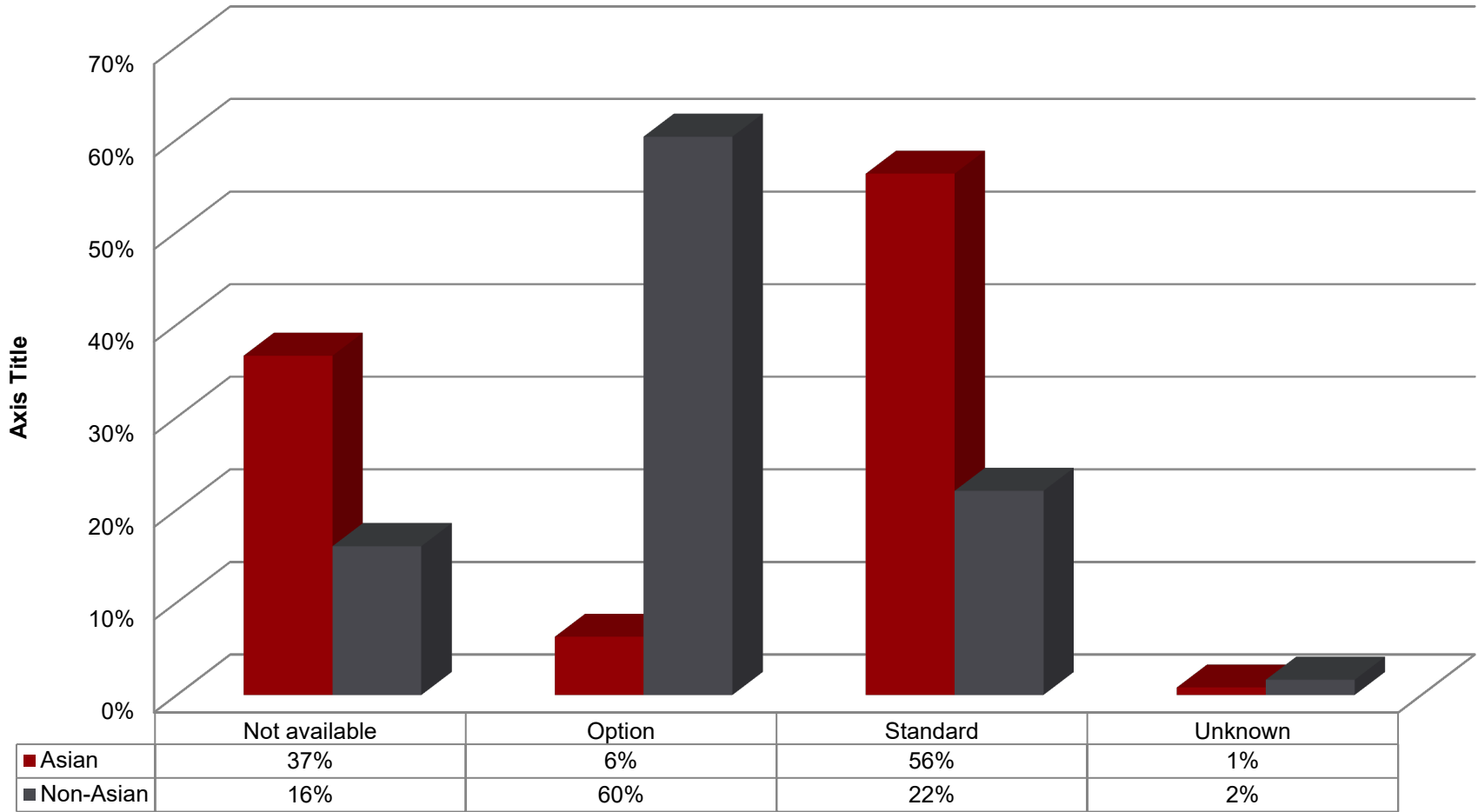
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Availability of DAB+: Premium vs Non-Premium H1 2019



DIGITAL RADIO TREND ANALYSIS

Availability of DAB+: Asian vs Non-Asian H1 2019



DIGITAL RADIO TREND ANALYSIS

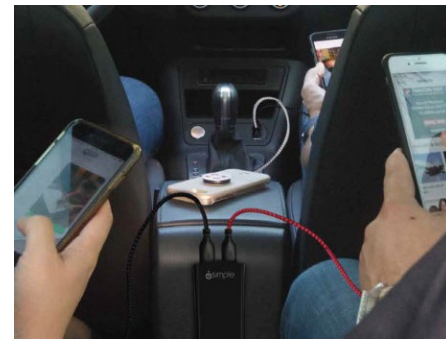
Future

The age of the connected car has arrived.

Much more than

- Bluetooth
- Apple CarPlay
- Android Auto
- Apps
- Traffic information

Bi-directional information exchange is key.



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Future

Just looking at the radio user experience

DAB+ can provide:

- **Free reception**
- Station name & logo
- Radiotext
- EPG
- Slideshow

Additional user requirements:

- Link with online content
- HQ content
- Social media integration
- Seamless interaction with smartphone

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Future

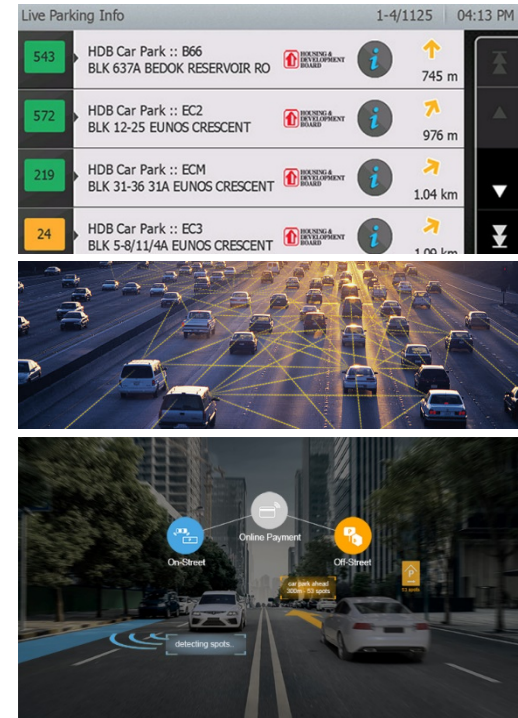
More factors at play:

- OEM & radio stations increasing interested in user profiles
- Vehicle in touch with maintenance network
- Community-driven services
- Traffic jam assistance
- Vehicle updates
- Vehicle-to-vehicle (V2V)
- Vehicle-to-infrastructure (V2I)
- Predictive parking

Coexist with Over-the-air (OTA) technology

Hybrid radio

- DAB+ broadcast signal carries audio
- Internet connection connects multimedia and interactivity



Thank You

Merci

Gracias

Grazie

Obrigado

Tack

Vielen Dank

Dank U

Kiitos

Спасибо

Ευχαριστούμε

תודה

ありがとう

谢谢

감사합니다

Terima Kasih

คุณขอขอบคุณ

cảm ơn bạn

धन्यवाद

شكرا لك



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