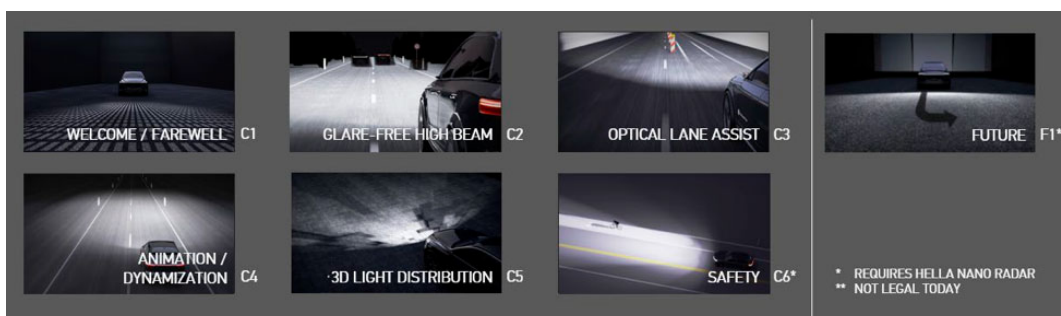




Today we've released our DVN Report on ISAL 2019, with annotated summaries of the lectures and presentations. Download your copy today; every summary is well worth your time. Since 1995, the International Symposium on Automotive Lighting, organised every two years by the Technical University of Darmstadt, has become a primary globally recognised forum for vehicle lighting technology. This year there were close to 900 attendees from Europe, Asia, and North America.

Two of the main focal points of the congress this year were communication between automated vehicles and other road users, and high-resolution headlighting systems. These topics are timely, of course, and they've also rapidly moved out of the theoretical and into the practical realm; in fact 15 million ADB-equipped cars of about 60 models from numerous makers are on the world's roads—except in the USA—without any reported problems.



Here are ten key points we retain from the two days of lectures, panel discussions, keynote speeches, and poster presentations:

1) ADB, more and more in the generalist brands

Technical constraints that confined to high/low beam systems have been removed by ADB, which is expanding into high-volume, popular-price models. The high/low-beam binary which has never been good enough for the job is obsolete; how long it takes to die out remains to be seen.

2) ADB, but on high-resolution systems

Recent ISALs had a strong focus on ADB, mostly looking at systems and ideas for 8, 16, and 32 segments. This year was different: still a predominant focus on ADB, but on high-resolution systems, no longer with just a few segments.



3) Road image projections

Road image projections for new kinds of turn signal and reversing lamp repeaters, vehicle-width guidance through lanes narrowed by construction, and other such driver-aid functions are under very active development.



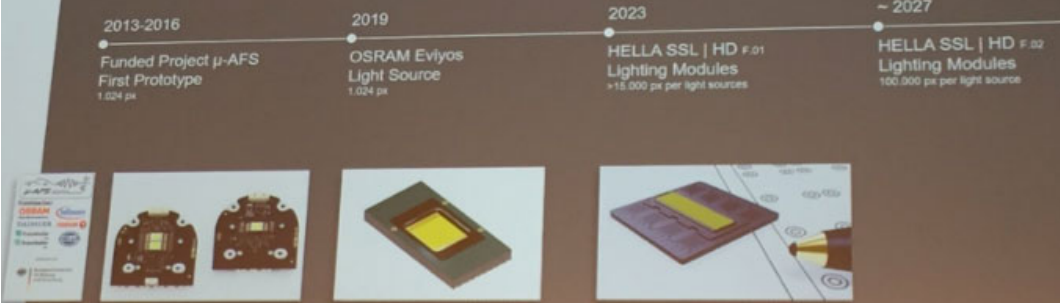
4) Visible communication between front and rear lights to help pedestrians and other drivers is another



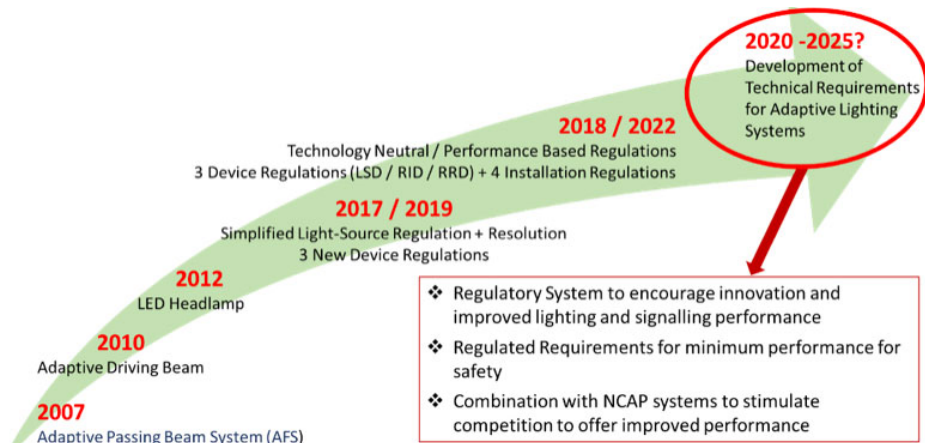
5) Displays V2X communication and brand communication are arriving



6) Sidelight LEDs combine the new technologies with a great future



7) Regulations and testing are poised for a big industry standardisation resistance to



8) Testing methods too, must keep up with new technology so as to assure the measurements are in a



only regulations on LEDS, HIR, and other systems, the main thing is technical and the legal part of LEDs