

**Dedicated Short
Range
Communications:
*Wireless
Technology for
Safer Roads***

Market Study
3Q 2014





Dedicated Short Range Communications: *Wireless Technology for Safer Roads*

Market Study

Published 3Q 2014
Version 1.0
Report Number: 03Q2014-01

iGR Inc.
12400 W. Hwy 71
Suite 350 PMB 341
Austin TX 78738

Table of Contents

Abstract	1
Executive Summary	2
DSRC Deployment Cost Estimates	2
U.S. DSRC Cost Estimates.....	4
European DSRC Cost Estimates.....	4
Methodology	5
DSRC Overview	6
What is DSRC	6
Who is Driving DSRC and V2X	6
DSRC Functionality	8
DSRC Applications	8
DSRC Benefits	9
Figure 1: Core DSRC Benefits	10
DSRC Challenges	11
Figure 2: DSRC Challenges	12
DSRC Technology	15
Spectrum	15
Other uses for this spectrum	15
Support and Opposition to DSRC	16
DSRC Architecture	18
U.S. V2V Testing and Trials	18
U.S. V2I Deployment Planning	20
Status of DSRC Mandates	21
Timeframe for DSRC Introductions	21
United States	21
Europe	22
Asia Pacific	22
Building DSRC into Cars	22
Figure 3: Key Components of Vehicle DSRC.....	23
Building DSRC Into Infrastructure	23
Figure 4: Elements of DSRC in Infrastructure	24
DSRC Deployment Cost Estimates	25
Major assumptions	25
U.S. DSRC Cost Estimates	26
DSRC Infrastructure estimates.....	26
DSRC vehicle cost estimates	27
European DSRC Cost Estimates	27
DSRC Infrastructure estimates.....	27

Quoting information from an iGillottResearch publication: external — any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2014 iGillottResearch, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

DSRC vehicle cost estimates	27
DSRC Vendors	28
Vendor Profiles	28
Conclusions and Recommendations	31
Definitions	32
General	32
Device Types	32
Services	33
Network Technology	34
About <i>iGR</i>	38
Disclaimer	38

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2014 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Abstract

Dedicated Short-Range Communications presents an opportunity to make streets safer, travel easier and minimize the impact vehicles have on the environment. While the technology could have significant benefits if and when deployed and adopted en masse, the market for DSRC remains nascent. The technology faces challenges from large companies and industry organizations that would like to use some of the spectrum, as well as the usual slew of issues new technologies grapple with before commercialization.

This market study examines DSRC services, recaps major testing initiatives and trials in the U.S., discusses the barriers and drivers of the technology, and presents information on likely deployment of DSRC for vehicle-to-vehicle and vehicle-to-infrastructure uses. It also presents a cost estimate to build out DSRC in the U.S. and Europe.

Key Questions Addressed:

- What is DSRC, and why is it useful for vehicle safety applications?
- What types of vehicle-to-vehicle and vehicle-to infrastructure applications does DSRC allow for?
- What are the benefits of DSRC, and what are some business challenges and spectrum challenges the technology needs to overcome?
- How has the government tested DSRC, and when are DSRC mandates expected?
- How much will DSRC cost to build out in the U.S. and Europe, and what are the opportunities for infrastructure vendors and vehicle OEMs?

This report is recommended for:

- Automotive manufacturers and suppliers
- M2M providers
- Technology and ITS vendors
- Infrastructure providers
- Mobile device OEMs
- Mobile service providers
- Financial and investment analysts.

Quoting information from an iGillottResearch publication: external — any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2014 iGillottResearch, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2014 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.