



IRIDIUM UPDATE – AUGUST 2018

IRIDIUM LAUNCH PROGRAM UPDATE

The background of the slide is a composite image. It features a sunset scene with a large cargo ship on the water, its reflection visible. The sky is a mix of orange and blue. Overlaid on this is a complex network of white lines connecting various nodes, resembling a satellite constellation or a data network. The nodes are small circles, and the lines are thin and white.



Iridium **NEXT**

Full Program: Eight rockets, 75 satellites.

Last launch (7th) completed.

Final launch planned later this year.

Fantastic Launch program with many
“firsts” by SpaceX and Iridium



IRIDIUM NEXT LAUNCHES

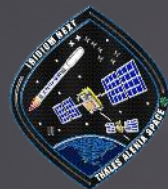
Launch 1 – January 14, 2017

- 10 satellites launched



Launch 2 – June 25, 2017

- 10 satellites launched



Launch 3 – October 9, 2017

- 10 satellites launched



Launch 4 – December 22, 2017

- 10 satellites launched



Launch 5 – March 30, 2018

- 10 satellites launched



IRIDIUM NEXT LAUNCHES

Launch 6 – May 22, 2018

- 5 satellites launched
- Rideshare with GRACE-FO



Launch 7 – 25 July 2018

- 10 satellites launched



Launch 8 – 3Q 2018 (targeted)

- 10 satellites to be launched

**Iridium NEXT Constellation
Complete in 2018**



IRIDIUM NEXT SATELLITES

65 in Space

Altitude 781 km

Around 60 Operational

6 of last 10 already operational

10 More Coming

Final Launch planned

**Full Constellation (66)
Delivered by End 2018**

By end 2018 and 9 Spares



IRIDIUM GMDSS PROGRAM UPDATE



IRIDIUM GMDSS IMPLEMENTATION WORK ITEMS

Iridium Internal Work

- Iridium Safety Gateway (ISG) Development – Hot Back-up
- External connectivity and integration – Interoperability
 - RCCs
 - MISPs
- IMSO work and Letter of Compliance
- Terminal Installation Guidelines (VAMs)
- Iridium GMDSS Terminal Certification

External Work

- IEC Test Standard
- Terminal Development and Type Approval



GMDSS PROGRAM

- Program commenced 2013
- Recognition gained 21st May 2018
- Implementation period (12-18 months)
- Development expected to be complete during 2019 (Letter of Compliance)
- Terminal Type Approvals expected during 2019 (depending on Flag adoptions of IEC Test Standard)
- Services may become available 2019
- SOLAS Amendments take effect 1st Jan 2020
- Implementation, Type Approval & SOLAS =
Iridium can be used for SOLAS Compliance



DEVELOPMENT TIMELINE

<ul style="list-style-type: none">• Requirements – Q2 & Q3• Design – Q3 & Q4	2018
<ul style="list-style-type: none">• Development – Q1 & Q2• Testing - Q2 & Q3• Evaluation and Letter of Compliance - Q3 & Q4	2019
<ul style="list-style-type: none">• SOLAS Amendments – 1 Jan 2020	2020



KEY QUESTIONS FOR MSI PROVIDERS

- What system for delivering MSI do you currently use?
 - Email?
 - Web interface?
- What system do you want to use?
 - Any issues with current system?
- Are there features that you would like to have in the future?
 - Delivery Numbers (vessels)?
 - Delivery Receipt?
- Interoperability work may cover all questions



SUMMARY

- The new Iridium network will be the newest L-Band constellation and highly resilient and robust
- Significant work program needed to be completed before 1 January 2020
- Iridium has targeted finishing development work during 2019
- We have commenced work on the program and is progressing well
- We would like to get engagement and feedback from stakeholders to ensure the system being built not only fulfils requirements but takes advantage of any features that the Iridium system may be able to offer
- Our goal is to not only add Iridium to GMDSS but to also improve services and improve maritime safety