Communicating about our missions

Dr Emily Baldwin
Space Science Editor
EJR-Quartz for ESA

Geoplanet workshop 10 Jan 2018
Overview

- The Who, Why, What, When and How of communications
- Examples: Following a mission throughout its lifetime
- Case study: Rosetta
- Coming soon…
Why communicate?

What is ESA?
The European Space Agency (ESA) is Europe’s gateway to space. Its mission is to shape the development of Europe’s space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world.
Why communicate?

To raise awareness, understanding and support of our activities, by providing information and opportunities to engage.
Why communicate?

To promote:
• THE Space Agency for Europe
• United space in Europe / International cooperation
• Europe’s world class science, industry and technology

...To the largest possible audience
The White House retweeted:

**Philae Lander** @Philae2014 · Nov 12
Touchdown! My new address: 67P! #CometLanding

**SpaceX** @SpaceX

Congratulations @esa on @Philae2014’s touchdown on comet 67P! #CometLanding

**Neil deGrasse Tyson** @neiltyson

Yup. We’re soft landing on a comet today. Normally my “We” means @NASA. But in this case it’s @ESA, the European Space Agency.

**Royal Dutch Airlines** @KLM · Nov 12
Congratulations @esa! #CometLanding

**Google**

Congrats ESA!
Who do we communicate to?
When do we communicate?

- Key mission events
- Important scientific results
Mission themes and mission selection

ESA’S NEW VISION TO STUDY THE INVISIBLE UNIVERSE

28 November 2013 The hot and energetic Universe and the search for elusive gravitational waves will be the focus of ESA's next two large science missions, it was announced today.

GRAVITATIONAL WAVE MISSION SELECTED, PLANET-HUNTING MISSION MOVES FORWARD

20 June 2017 The LISA trio of satellites to detect gravitational waves from space has been selected as the third large-class mission in ESA's Science programme, while the Plato exoplanet hunter moves into development.
Contractor selection, instrument development

EUROPE DELIVERS FIRST JWST INSTRUMENT

9 May 2012 The first instrument to be completed for the James Webb Space Telescope, MIRI, was handed over by the European consortium that built it to ESA at a ceremony held in London today, and will now be delivered to NASA aiming for launch in 2018.

The delivery of MIRI, the Mid InfraRed Instrument, marks an important milestone for JWST, an infrared space observatory with a collecting area more than two and a half times larger than ESA’s Herschel Space Observatory – the largest infrared scientific telescope so far flown to space.

FULL GO-AHEAD FOR BUILDING EXOMARS 2020

16 December 2016 The first ExoMars mission arrived at the Red Planet in October and now the second mission has been confirmed to complete its construction for a 2020 launch.

ESA and Thales Alenia Space signed a contract today that secures the completion of the European elements of the next mission.
Testing milestones

BEPCOLOMBO SOLAR WING DEPLOYMENT TEST

HELICOPTER TEST FOR JUPITER Icy MOONS RADAR

26 September 2017 A long radar boom that will probe below the surface of Jupiter's icy moons has been tested on Earth with the help of a helicopter.
Landing site selections

**FINAL TWO EXOMARS LANDING SITES CHOSEN**

28 March 2017  Two ancient sites on Mars that hosted an abundance of water in the planet’s early history have been recommended as the final candidates for the landing site of the 2020 ExoMars rover and surface science platform: Oxia Planum and Mawrth Vallis.

**CALL FOR MEDIA: ROSETTA LANDING SITE ANNOUNCEMENT**

4 September 2014  Members of the media are invited to ESA Headquarters in Paris, France, on 15 September for the announcement of the primary landing site for Rosetta’s lander Philae, where in November it will attempt the first soft touchdown in history on a comet.
Launch, cruise and arrival

ExoMars orbiter @ESA_TGO · 14 Mar 2016
YEEEEEAAAHBBBBH! Thank you @Roscosmos for a rockin’ ride to #space! 7 months & 500 million km to Mars! #ExoMars

ExoMars orbiter @ESA_TGO · 14 Mar 2016
Stuck, relax & enjoy the cruise to Mars! Will provide regular updates during flight & about destination. :-)

ExoMars orbiter @ESA_TGO
Oct 19, 2016
YES! CONFIRMED! I'm in Mars orbit! #ExoMars

ExoMars orbiter @ESA_TGO
Oct 19, 2016
Schiaparelli with parachute deployed
SCHIAPARELLI LANDING INVESTIGATION COMPLETED

European Space Agency
First views, last views

**Hello, Comet!**

The final image from ESA_Rosetta #OTD last year turned out to not be so final! Last impression reconstructed: ow.ly/atsL30fHwc

Incredible week testing out my science instruments for first time at #Mars! Full summary, incl images: ow.ly/6yH9p6C2zNC #ExoMars
Science, science and more science!

How to make a news story

1. Project scientist alerts comms team of upcoming peer-reviewed paper

2. ‘Editorial Board’ (science experts and editors) discusses potential for news coverage and for which audience/platform

3. Coordination with lead authors, journal and external partners, and production of story and graphics

4. Publish and promote on ESA channels, address any feedback

HEATING OCEAN MOON ENCELADUS FOR BILLIONS OF YEARS

6 November 2017  Enough heat to power hydrothermal activity inside Saturn’s ocean moon Enceladus for billions of years could be generated through tidal friction if the moon has a highly porous core, a new study finds, working in favour of the moon as a potentially habitable world.
Archiving and Legacy

→ OSIRIS DATA RELEASE: MARCH–MAY 2015

A new batch of thousands of images from Rosetta’s OSIRIS imaging system have been released into ESA’s Archive Image Browser and the Planetary Science Archive.

This latest OSIRIS data release comprises 2423 narrow-angle camera images and 4378 wide-angle camera images from the period 11 March – 24 May 2015. You can browse through the new images in the MTP 014, 015 and 016 albums here.

Example of images from the OSIRIS narrow-angle camera albums in the latest data release. Credits: ESA/Rosetta/MPS for OSIRIS Team MPS/UPD/LAM/IAA/SSO/INTA/UPM/DASP/IDA
Rosetta case study
Rosetta’s journey...
...compared with evolution of social media

Platform launch

“...Once mission controllers have established contact with Rosetta, our @ESA_Rosetta Twitter channel will also wake up, making this the best immediate source for confirmation that the spacecraft is awake...”

(ESA Press release text)
#WakeUpRosetta
The power of a hashtag, and sharing the emotion – live
Linking everyday themes to mission milestones

20 Jan 2014: Spacecraft wakes up
- How do you wake up?
- How do you say ‘wake up’ in your language?
- Rosetta wakes up at 10am; what do YOU do at 10?
- Sleeping Beauty

6 Aug 2014: Arrives at destination
- “Are we there yet?”
- Journey / Arriving
- Where are YOU going?
- What do we do when we get there? (Mission themes: water, life…)

12 Nov 2014: Landing
- Choosing where to visit
- Finding a name for “site J”
Competitions

20 Jan 2014: Spacecraft wakes up

Wake Up Rosetta! – video contest

- 218 entries
- 75,000 votes

6 Aug 2014: Arrives at destination

Are we there yet? – photo contest

- 270 entries
- 23,000 votes

12 Nov 2014: Landing

Name site J – naming contest

- 8000+ entries received in 6 days
- 135 countries, 54 languages
Ambition: Sci-fi meets sci-fact

youtube.com/esa
#CometLanding Behind the scenes

Rosetta And Philae Are Being Absolutely Adorable To Each Other On Twitter

Comet landing messages melt hearts on Twitter

Watch Twitter Explode During the Comet Landing
Philae: ‘I'm feeling a bit tired, did you get my data? I might take a nap’

'I'm feeling a bit tired': comet lander's struggle for power, as seen on Twitter

Rosetta and Philae are breaking our hearts on Twitter

Rosetta and Philae: the most high profile break-up this year
What next?

LAUNCH YOUR DESIGN WITH CHEOPS

2 November 2017 ESA is offering graphic designers and artists a unique opportunity to feature their work on the rocket carrying the Cheops satellite.

THREE THOUSAND DRAWINGS TO FLY INTO SPACE ON CHEOPS

31 March 2016 Thousands of children across Europe have taken part in a competition to submit drawings that will be miniaturised and sent into space onboard ESA’s Cheops astronomy satellite.
What next?

5 October 2018

Launch window opens
Thank you!

emily.baldwin@esa.int
www.esa.int

@astroemz
@esascience