

## Annex E: Evaluation Audit Trail Template

*(To be completed by the Project Management to show how the received comments on the draft report have (or have not) been incorporated into the report of the evaluation. This audit trail should be included as an annex in the final evaluation report.)*

**To the comments received in February 2024 from the Midterm Evaluation of UNOSAT Mapping Service – Evidence-Based Information Support to Humanitarian Assistance, Peace and Security using Satellite Imagery and Geospatial Techniques” project**

*The following comments were provided in track changes to the draft evaluation report; they are referenced by author (“Author” column) and track change comment number (“#” column):*

Author	#	Para No./ comment location	Comment/Feedback on the draft evaluation report	Evaluator response and actions taken
Luca DELL'ORO	1	General	Suggest using the following denomination throughout all document for consistency: “The UNOSAT Emergency Mapping Service (EMS)”.	Change made to EMS throughout.
Beatriz De Souza	2	Executive Summary	Suggest using the term UNOSAT-EMS throughout the document.	Change made to EMS throughout.
Beatriz de Souza	3	Executive Summary	“Data” mentioned twice. I suggest we remove one or add a qualifier if we mean two different types.	Removed.
Lars Bromley	4	Executive Summary	Suggest to deleted paragraph 4, if the section is too long.	Paragraph maintained.
Lars Bromley	5	Executive Summary	In later pages the UN Disaster Response System is cited repeatedly but I think it may need a name change to the UN crisis and disaster response system and it should be explained in a paragraph like this. It may not belong in the Executive Summary so please move it if needed.	Changed UN Disaster Response System to the UN crisis and disaster response.
Samir BELABBES	6	Executive Summary	Suggest changing “is free of charge” for “free”.	Change made.
Lars Bromley	7	Executive Summary	Spell out OECD-DAC and then abbreviate.	Change made.
Luca DELL'ORO	8	Executive summary	Specify (whether is possible) finding and conclusions in relation with feedback received for EM services provided during conflicts and rapid onset disasters.	Specified for each finding and conclusion.

Luca DELL'ORO	9	Executive summary	Replace "supporting people made vulnerable by" with "supporting people affected by".	Change made.
Luca DELL'ORO	10	Executive summary	Replace "affected by emergencies" by "affected by rapid on-set disasters, complex emergencies and crisis".	Change made.
Lars Bromley	11	Executive summary	Impact stories showcasing gender-sensitive humanitarian assistance - If this is not in the funding plan it may be difficult to implement beyond a few brief stories.	Something is better than nothing.
Luca DELL'ORO	12	Executive Summary	Provide clarification on the paragraphs and the reference to environmental principles.	Have given an example of a set of environmental principles that projects are increasingly asked to evaluate themselves against, including in the TOR of this evaluation.
Luca DELL'ORO	13	Executive Summary	Recommends editing the text p. ix para 4: It has a complementary relationship with OCHA and ESCAP in disaster response, among others` to `The UNOSAT EMS responds to requests made by different humanitarian organizations such as UN agencies (i.e. OCHA, UNICEF, WFP, FAO etc.), IFRC and National Governments.	Change made.
Lars Bromley	14	Executive Summary	Not sure if the term UN's Disaster Response System is a formal entity within the UN and does it also apply to conflicts.	Changed the title as the one suggested.
Luca DELL'ORO	15	Executive Summary	Replace "...valued by others in the system" with "...valued by others in the humanitarian system".	Change made.
Luca DELL'ORO	16	Executive Summary	Suggests mentioning all partners involved in the Disha project: Google.org, the Jain Family Institute, McKinsey & Company, the Patrick J. McGovern Foundation, the United Nations Development Programme (UNDP), the United Nations Satellite Centre (UNOSAT) and the World Food Programme (WFP).	Added reference to Disha project.
Luca DELL'ORO	17	Executive Summary	The comment refers to 'On what basis should we consider financing, analyst retention and demand exceeding supply as threats? In my opinion, UNOSAT EMS has proven in its 20 years	Specified that analyst retention mostly applied for

			of operation to be a predictable service that has become a recognized reference in the humanitarian system.	peace, security and human rights.
Luca DELL'ORO	18	Executive Summary	Replace "2018 evaluation" with "2018 independent evaluation".	Change made.
Luca DELL'ORO	19	Executive Summary	Replace "AI models" with "AI based applications".	Change made.
Luca DELL'ORO	20	Executive Summary	Clarify if "research strategy" refers to R&D.	Change made.
Luca DELL'ORO	21	Executive Summary	Suggests expanding and briefly explain about 'Co-location with ESCAP, UNOCC, and CERN has proven beneficial.	Each has their own differing reasons that are described in the main body of the evaluation. I have included links to the relevant findings so the reader can click through if they want to know more.
Luca DELL'ORO	22	Executive Summary	Suggests rephrasing text p ix para 12 'partners are OCHA, Copernicus EMS, and REACH' expanding the specification of end-users and partners.	Specified end-users and partners.
Lars Bromley	23	Executive Summary	REACH as a partner of the mapping service: When UNOSAT collaborates with Impact Initiative and ACLED it is done as part of REACH, but REACH is independently funded and not done under Norwegian funds.	Removed REACH. Relationship with REACH is described later
Luca DELL'ORO	24	Executive Summary	The comment is regarding 'The current M&E system is sufficient despite not adopting "UN-ASSIGN for real-time impact assessment".  Not clear why should be included considering that UNOSAT provides satellite imagery analysis support and UN-ASIGN is just a tool to collect photos/videos from the field.	It is included because it was in a recommendation in the previous independent evaluation on impact assessment.
Luca DELL'ORO	25	Executive Summary	Provide more information about text p ix para 13 'The Mapping Service's cost per request has remained relatively stable, and it is likely to be much less expensive than Copernicus EMS '.	I have included links to the relevant findings.
Lars Bromley	26	Executive Summary	Related to the cost of the UNOSAT-EMS: Is conflict conflated with disasters here, or are we excluding conflict and complex emergencies?	Added to the sentence "conflicts and complex emergencies".
Beatriz De Souza	27	Executive Summary	Suggestion on the Theory of Change: would perhaps strengthening the humanitarian response system be a long-term goal for the project? As the interviews, case studies and impact stories show, UNOSAT's products have been used by many different UN agencies and by member states to respond to emergency situations. Wouldn't it make sense to expect that by doing so	Noted. Impact more related to SDG 17, refers to Indicators aligned to targets 17.6 and 17.8.

			UNOSAT has contributed to make that system stronger/more efficient? [That would mean an impact more related to SDG 17].	
Luca DELL'ORO	2	Executive Summary	Suggests changing the terminology `discretion`.	Changed to confidentiality throughout the report.
Beatriz de Souza	29	Executive Summary	Related to reference of the EMS products: It would be good to square away those two statements to better articulate a take on awareness raising - it is a desirable result. Is the concern with too much awareness significant? Or is it a potential risk, inherent to raised awareness?	Change made. However awareness raising among potential donors is needed.
Luca DELL'ORO	30	Executive Summary	Provide clarification about REACH as main user.	REACH deleted from the sentence. REACH is not a user, but a partner of a related project.
Beatriz de Souza	31	Executive Summary	Clarification of REACH as main user: Good point. Sharing of products with REACH is done under separate agreements, not NMFA funded. The point of them better referencing UNOSAT in when publishing outputs is well taken, but that particular cooperation falls outside of the scope of the Emergency Mapping Service.	REACH deleted from the sentence. REACH is not a user, but a partner of a related project.
Beatriz de Souza	32	Executive Summary	Refer to contribution of the EMS to partner's work: This speaks to my earlier point on considering the strengthening of the response system as the longer-term result of the service.	Noted.
Beatriz de Souza	33	Executive Summary	Comment related to synergy with the NORAD project: Would more integration with other projects be recommended?	The projects were found to be complementary yet making benefit of the synergies via the backstopping support and the close relationships built with the 8 NORAD project countries.
Beatriz de Souza	34	Executive Summary	Clarification of the term fragile: Based on the discussion on the last meeting, I believe it would be good to clarify what it is meant by "fragile". Am I correct to assume that it does not mean that the service could suddenly find itself without funding and become unavailable, but rather that there is an increased risk that comes with having a flagship project funded by only one donor? My suggestion would be to be a more descriptive on <i>what is meant</i> by fragile, this could avoid misconceptions	Text adjusted.
Luca DELL'ORO	35	Introduction	Substitute UNOSAT as a centre by UNOSAT as a programme.	Change made.

Beatriz de Souza	36	Introduction	Provide clarification on the statement: “The service increasingly handles requests related to complex emergencies, requiring continuous monitoring and additional support compared to sudden onset disasters”.	Defined complex emergency when the term first appears, and deleted the word ‘increasingly’.
Lars Bromley	37	Introduction	Clarification on the above: I’d say ~7 years ago we worked ‘increasingly’ and now we work pretty much all the time on complex emergencies in my team.	Deleted the word ‘increasingly’.
Beatriz de Souza	38	Introduction	Clarification on outcome “: i) enhanced evidence-based decision-making in humanitarian assistance and peacekeeping » : If the goal is to be succinct, maybe the terms peace and security could be used. But <i>peacekeeping</i> evokes international military force involvement, so I would avoid it. Replaced by « the promotion of peace, justice, security and protection of human rights ».	Change made.
Beatriz de Souza	39	Introduction	On the timeline: This makes it seem like UNOSAT developed the UN Assign application.	Added a reference to the second sentence.
Beatriz de Souza	40	Introduction	Clarification whether the term “small team of staff” refers to number – members in the team.	The evaluation team received different information from interviewees and does not have precise numbers. It is small in comparison to other UN teams, but probably big compared to other UNITAR teams.
Beatriz de Souza	41	Introduction	Clarification on the statement “key disaster response milestones”: Not only disasters.	Change made to include complex emergencies and conflicts.
Beatriz de Souza	42	Introduction	Clarification on statement: “It supports users through training, capacity building”: Not within the scope of this project.	Phrase deleted. If capacity building is outside the scope of the project, then its possible long-term outcome of a strengthened system is also outside the scope of the project.
Beatriz de Souza	43	Purpose and Scope of the Evaluation	Referring to cross-cutting topics adopted by the evaluation: Maybe include the reference for assessment on these? Their respective international frameworks, blue marble, etc.	They are referenced in the next section.
Beatriz De Souza	44	Evaluation approach and methods	For the benefit of non-experts, clarify what is meant by participatory approach.	Explanation made.

Beatriz de Souza	45	Evaluation approach and methods	For non experts, explain more what an AAR entails.	Added a reference.
Lars Bromley	46	Evaluation approach and methods	Not sure if members of my team were included in the AAR.	Yes, they were included in the first AAR carried.
Beatriz De Souza	47	Evaluation approach and methods	In reference to the online survey: Following up on what was discussed on our last meeting, it may be worth mentioning the fact that for the complex emergencies, the evaluation relied on interviews rather than on surveys. One relevant factor for doing so: considerably smaller number of potential respondents - products not normally aimed at wide distribution (as it is the case with disasters, where we publish on our website, hdx, publish on social media links to them), but rather for "the users eyes only".	Change made.
Luca DELL'ORO	48	Challenges and Limitation	Replaced "external evaluation" by "independent evaluation".	Change made.
Luca DELL'ORO	49	Challenges and Limitation	Provide clarification on the term "monitoring function".	Substituted by "monitoring expert".
Luca DELL'ORO	50	Challenges and Limitation	Provide clarification about text p xviii para 3 'The third limitation was that the peace, justice, and human rights team needs to be discreet about its activities and contacts for political reasons, much more so than the Mapping Service's responses to natural disasters'.	Changed to confidentiality throughout the report.
Beatriz De Souza	51	Challenges and Limitation	Suggest rephrasing "much more is likely going on that can be reported" with "Perhaps something along the lines of acknowledging the analysis done by the evaluation team was not exhaustive; that there are known blind spots; etc. ».	Change made.
Beatriz De Souza	52	Evaluation findings Finding 1	Goal 1 "No poverty": I would suggest adding to this dimension of the work the percentage of products that focus on events in LDCs.	Included a paragraph of countries in special situation.
Beatriz De Souza	53	Evaluation findings Finding 1	Clarify if in the statement "UNOSAT-supplied images, used as part of damage assessments », the damage assessment was not performed by UNOSAT.	No, the damage assessments in Thailand were the responsibility of the Thai government agencies.
Beatriz De Souza	54	Evaluation findings Finding 1	For Goal 13: Just like SDG1 and LDCs, maybe here mention LLDC and SIDS.	Added.
Beatriz DE Souza	55	Evaluation findings Finding 1	For Goal 17: I would suggest emphasizing knowledge transfer, and cooperation for reaping the benefits of technology [ related to 17.6. Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination	Added access to science and sharing of mapping products. However, the indicator for this SDG target is related to internet access

			among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism ].	and it is not 100 per cent related. Unfortunately, though you could argue that you need internet to access GIS.
Lars Bromley	56	Evaluation findings Finding 2	I would be very careful with our website statistics and perhaps generalize them.	Added on average to generalize.
Beatriz De Souza	57	Evaluation findings Finding 3	Referred to the statement : « <b>The Mapping Service provides products that help them do their job, ipso facto, the Mapping Service is highly relevant to institutional needs</b> » : I would push back a bit on presenting this conclusion in such absolute terms. An example of what I believe is a relevant concurrent factor is the “niche” aspect of the work (one that seems to be gradually changing, btw) - in a context in which geospatial products similar to the ones offered by unosat could be easily found elsewhere, assuming that the product is highly relevant “just” because it helps them do their job could not be accurate.	No change made.
Beatriz De Souza	58	Evaluation findings Finding 3	Referred to the statement : « <b>The results for complex emergency products were not quite as good for understandable reasons relating to the need for discretion</b> » : It might be worth clarifying further. By results is meant the response rate or the assessment of the service itself? If the latter, how does the need for discretion justify it? If the first, maybe it is worth explaining it a bit more, e.g., users are less inclined to share any time of information regarding the products?	Text adjusted.
Lars Bromley	59	Evaluation findings Finding 3	IFRC is not a UN agency.	Deleted.
Luca DELL'ORO	60	Evaluation findings Finding 1	For Goal 17: Here we should perhaps mention our partners with GISTDA, Wuhan, ESA, REACH, CBAS, PDC, etc.	Reference to MoUs was included.
Beatriz De Souza	61	Evaluation findings Finding 3	“Indeed, the International Charter for Space and Major Disasters (Space Charter), which UNOSAT uses heavily for imagery, can be activated for natural disasters but not for conflicts » Non sequitur?	Change in the wording to make it clear.
Luca DELL'ORO	62	Evaluation findings Finding 3	Substitute “uses heavily” by “often relies”.	Change made.
Luca DELL'ORO	63	Evaluation findings Finding 3	Rephrase “When Russia invaded Ukraine”.	Not sure about the question.
Beatriz De Souza	64	Evaluation findings Finding 4	Clarify meaning of countries in special situations.	Clarification included.

Beatriz de Souza	65	Evaluation findings Finding 4	<p>RE EMS engagement with UNITAR GEEW working group: I would add here that this is one of the indirect ways in which the project supports the advancement of gender equality, as studies show women are more negatively affected by disasters and that those negative effects tend to have longer-term consequences. <a href="https://wrd.unwomen.org/sites/default/files/2021-11/Gender-Dimensions-of-Disaster-Risk-and-Resilience-Existing-Evidence.pdf">https://wrd.unwomen.org/sites/default/files/2021-11/Gender-Dimensions-of-Disaster-Risk-and-Resilience-Existing-Evidence.pdf</a>  <a href="https://www.gfdr.org/sites/default/files/publication/gender-equality-disaster-recovery.PDF">https://www.gfdr.org/sites/default/files/publication/gender-equality-disaster-recovery.PDF</a>  <a href="https://www.worldbank.org/en/topic/disasterriskmanagement/publication/gender-dynamics-of-disaster-risk-and-resilience">https://www.worldbank.org/en/topic/disasterriskmanagement/publication/gender-dynamics-of-disaster-risk-and-resilience</a></p> <p>Similar point to be made in complex emergencies</p> <p><a href="https://www.ohchr.org/en/women/womens-human-rights-and-gender-related-concerns-situations-conflict-and-instability">https://www.ohchr.org/en/women/womens-human-rights-and-gender-related-concerns-situations-conflict-and-instability</a></p> <p><a href="https://documents.un.org/doc/undoc/gen/n23/279/08/pdf/n2327908.pdf?token=UID1sU8ilcHWvAHChE&amp;fe=true">https://documents.un.org/doc/undoc/gen/n23/279/08/pdf/n2327908.pdf?token=UID1sU8ilcHWvAHChE&amp;fe=true</a></p>	Re-formulated.
Beatriz De Souza	66	Evaluation findings Finding 4	Suggest exploring ways to take lessons from the “Women's Resilience to Disasters Knowledge Framework”: <a href="https://wrd.unwomen.org/practice/topics">https://wrd.unwomen.org/practice/topics</a>	Added.
Luca DELL'ORO	67	Evaluation findings Finding 5	Replaced « on-the-ground validation » with « evidence based damage analysis ».	Change made.
Luca DELL'ORO	68	Evaluation findings Finding 6	Clarification required for the statement: « <b>UNOSAT Mapping Service is particularly complementary to ESCAP and OCHA.</b> » « Why ESCAP? I would say to UN agencies and UN organization in general?	ESCAP is part of the UNOSAT-EMS users.
Beatriz De Souza	69	Evaluation findings Finding 6	As a follow up to the comment above: Maybe we would also like to mention the UNOCC?	Added.
Lars Bromley	70	Evaluation findings Finding 6	On the number of staff dedicated to the EMS: This seems too small, there are 10 in my team alone...	Adjusted.
Luca DELL'ORO	71	Evaluation findings Finding 6	Request clarification on the statement: “The evaluation looked at the extent to which the Mapping Service’s main pillars are or could be working together”.	Clarification made.
Beatriz De Souza	72	Evaluation findings Finding 8	Suggestion for approach to EQ 2.3.: To this point I would recommend considering the mailing list that receives the products (disaster-related)- UNOSAT does not share the product only with requestor, but share it with all known stakeholders who act in the area, which should contribute	Adjusted.



			to avoid redundancies. Plus, our consistent publishing of products on the UNOSAT website and on websites like HDX for example, means that most stakeholders know to check those before engaging in image acquisition or analysis themselves. They would first check if UNOSAT has not done it already.	
Luca DELL'ORO	73	Evaluation findings Finding 8	Substitute "Include UNOSAT and the Mapping Service" with "Includes UNOSAT".	Change made.
Lars Bromley	74	Evaluation findings Finding 8	Request clarification on the paragraph since it refers to disaster but includes organizations that are not focused on natural disasters.	Changed from disaster response system to crisis and disaster response system.
Luca DELL'ORO	75	Evaluation findings Finding 8	Regarding the description of the UN disaster response system: Those are initiatives / coord tools...should not be mention as part of the UN disaster response system.	Change made.
Luca DELL'ORO	76	Evaluation findings Finding 8	Clarifying statement: the charter is just one of the mechanisms for satellite acquisitions.	Change made.
Luca DELL'ORO	77	Evaluation findings Finding 8	Clarifying statement: UNOSAT collaborates with different mapping organizations which support the charter as VA, including Copernicus EMS.	Reformulation made.
Beatriz De Souza	78	Evaluation findings Finding 9	Suggestion for approach to Finding 9: I would have liked a point of reflection here which takes into account growing GIS capacity in-house in other agencies. How widespread is it? To what extent the existence (and potential growth) of this capacity could impact UNOSAT's EMS relevance.	While interviewees reported on respective in house capacity, the evaluation did not collect sufficient data to compare capacity development of organizations over time.
Luca DELL'ORO	79	Evaluation findings Finding 10	Suggests complementing text p xxx para 8 adding 'mailing list and UNOSAT website at the time to mention including SMCS and the HDX, all for free`.	Noted and added.
Beatriz De Souza	80	Evaluation findings Finding 11	Comment on Finding 11: I think it would be relevant to take into consideration in this topic the horizontal nature of the cooperation within the system, which implies that once the charter is activated by another entity, UNOSAT is not in a position to "take over". I am not sure quite how to phrase, we can discuss it afterwards, but in the simplest of terms, it would be a way to clarify whether unosat's hands are "kind of tied" once that happened. Moreover, it would be interesting to get the evaluator's perspective on the feedback shared by the interviewees - is there a reputational risk here or it does not amount to that? Would it be beneficial to better inform users of how the charter activation works so they are not under the impression that UNOSAT was not <i>willing</i> to provide support in instances as the ones described?	Perhaps this is something that you can discuss with the project as an issue raised by the evaluation?

Samir BELABBES	81	Evaluation findings Finding 11	Suggests replacing text p xxxi para 10 'activation manager' to 'Charter Project Manager'.	Done.
Samir BELABBES	82	Evaluation findings Finding 11	The comment is that 'UNOSAT proposed to be Project Manager almost every time UNOSAT activates the charter. However, the final decision is under the Charter's secretariat mandate and they can decide to appoint another project manager even if UNOSAT is the triggering agency'.	Noted. It doesn't contradict what is written. In this case UNOSAT did not activate the charter.
Samir BELABBES	83	Evaluation findings Finding 11	The comment is regarding the Super Typhoon Noru in Philippines and UNOSAT not participating, specifying that 'OCHA Philippines. UNOSAT informed OCHA Regional Office in Bangkok and they have agreed that there is a risk of duplication' and 'The main concern for the case was the risk of duplication and not busy working. This last point was in addition to explain why the duplication is better to be avoided.'	Noted. Change made accordingly.
Samir BELABBES	84	Evaluation findings Finding 11	Suggest rephrasing text on p xxxii para 1 'The report also lacked UNOSAT's initial damage assessment of infrastructure, as previously carried out for Typhoon Rai, and had proved very useful to inform OCHA's own damage assessment at the time'. Mentioning that not requested as carried out by another entity including local institution.	Changed 'lacked' to 'was without' .
Samir BELABBES	85	Evaluation findings Finding 11	The comment is 'this concern is fully related with internal WFP communication channels'.	I say it is related to internal WFP communication.
Lars Bromley	86	Evaluation findings Finding 12	Double check if the Human Rights Watch is still active.	Footnote added. MoU dates back to 2011, however, it does not have an expiration date.
Lars Bromley	87	Evaluation findings Finding 12	Double check if the agreement with Google is still active.	Footnote added .Signed in 2009 but without end date and hence still active.
Samir BELABBES	88	Finding 12	The MoU is broader than the AI modelling.	Yes, I say this.

Beatriz De Souza	89	Evaluation findings Finding 12	Footnote needs to be added.	Footnote added.
Lars Bromley	90	Evaluation findings Finding 20	Clarification on intent to develop an AI model: We will attempt to develop models for shelter mapping and damage assessment. Some of this was prepared under NMFA funds and now occurs under another funded project, Disha.	Added.
Lars Bromley	91	Evaluation findings Finding 20	Regarding AI strategy development: I'd suggest thinking of our AI development a bit differently: the last project cycle nicely incubated a nascent AI capability at UNOSAT and also occurred with some timely good luck. Specifically, at the time a key hardware component (GPUs) were in ample supply via CERN but this has not been the case for ~2 years and we cannot afford to purchase the hardware ourselves. Wuhan has appropriate hardware but transferring conflict related analyses there might be considered problematic and we've decided not to do that. While we did have a lot of GPUs we also chose to pursue flood mapping with radar data as water is an extreme absorber of electromagnetic energy so relatively easy to detect. This resulted in a successful FloodAI program and in the last year we've been gearing up to try and repeat that success with shelter mapping and damage assessment. These are much more challenging for the reasons mentioned but only in January 2024 did we add the staff to start on these aspects under separate funding (Disha).	Changes made to reflect this.
Beatriz De Souza	92	Evaluation findings Finding 21	Regarding AI strategy development: I would suggest a wider perspective for the research strategy, due to the very nature of UNOSAT, it makes sense for it to have one. The mentioned projects could work as building blocks, but a clear vision for the research activities and its goals could allow UNOSAT to leverage that for the emergency mapping and perhaps develop more "research heavy" proposals to seek more funding.	Noted.
Lars Bromley	93	Evaluation findings Finding 23	Regarding UNOOC Watch Room: A colleague from the UNOCC Research and Liaison Unit was also interviewed.	We have referenced her, anonymously.

Samir BELABBES	94	Evaluation findings Finding 27	Provide more context to the text p xlv para 7 'Copernicus EMS is the only other entity offering a free disaster mapping service, but focusing on the European Union'.	We have added the sentence: "Copernicus EMS prioritizes activation requests from the EU and neighbouring countries".
Lars Bromley	95	Evaluation findings Finding 28	Provide clarifications on why REACH / Impact is highlighted several times in the document.	Moved to the efficiency section under the side projects. Finding 28 deleted.
Lars Bromley	96	Evaluation findings Finding 31	Referred to "9 to 10 people comprising the UNOSAT-EMS Team" look as a small number.	Adjusted.
Beatriz De Souza	97	Evaluation findings Finding 33	In reference to the ToC: I refer to the comment made in the executive summary, in which I suggest we consider the strengthening of the emergency response system as a potential longer term outcome of the mapping service, since many organizations have had their capacities to respond to emergencies made stronger by UNOSAT EMS - as informed by the UNOCHA interviewee mentioned.	Suggestion included.
Beatriz De Souza	98	Evaluation findings Finding 37	Replaced "after disasters" by "in the context of disasters".	Change made.
Beatriz De Souza	99	Evaluation findings Finding 39	On the EMS' cumulative effects: I would perhaps counterbalance this by suggest we look at the cumulative effect of the service itself rather than of the individual products. Indeed, the products become mostly (although not entirely, but that is beside the point) obsolete after the crisis. However, by being a fixture on the emergency response ecosystem, I believe UNOSAT has made a positive impact on that system as a role. I would make it not about the individual products, but about how the reliability of the service and what effect that have had.	Added in recommendations.
Beatriz De Souza	100	Evaluation findings Finding 40	On approach to the question: I am not quite sure I can extract an answer for the question proposed of likelihood of enduring. I acknowledge it is not a simple "yes or no", but I believe it would be good if the finding could more clearly address que question.	I think it is ok to leave this open. This is something that we can pull together in the conclusions.

Luca DELL'ORO	101	Overall	The recommendation mentions that 'the report should reflect the different needs of our monitoring users involved in conflicts and rapid onset disasters because the timeline is this is quite different.'	I am not clear as to how and where to incorporate this comment.
Lars Bromley	102	Conclusions – Conclusion 2	It may not be relevant but regarding gender issues we do have a very strong track record of hiring women into important projects that allow them to develop their career and has very often resulted in them moving on to higher level positions in government, the private sector, and other UN organizations.	Added.
Beatriz De Souza	103	Conclusions – Conclusion 2	The service is based on HPC, which has the protection of human rights as central.	Added.
Beatriz De Souza	104	Conclusions – Conclusion 2	Kindly check the comments I added on gender in the executive summary.	Adjusted.
Beatriz De Souza	105	Conclusions – Conclusion 6	Might be worth mentioning that a standing MoU is not a requirement for an organization to be able to activate and receive support from UNOSAT EMS.	Added.
Lars Bromley	106	Conclusions – Conclusion 7	'failure' is a little too harsh here, it's more that hiring and keeping analysts is a constant challenge and requires very frequent efforts to replace people. UNITAR as a whole is not quite set-up to be the 'geospatial subcontractor' that my team needs to be in many cases and advertising contracts and collecting applicants and hiring them is an incredibly onerous process, especially if the project is ~6 months. And, in my team we're always trying to meet expectations for our other funded projects as well, so NMFA work may lose out as we move people to other funded projects.	Adjusted.
Lars Bromley	107	Conclusions – Conclusion 9	See my comment above on AI, I think we're just in a research cycle and results are forthcoming, though the results may of course be negative (ie AI does not produce good results).	Noted.
Beatriz De Souza	108	Conclusions – Conclusion 10	Reference to ESCAP.	Added Member States.
Beatriz De Souza	109	Conclusions – Conclusion 11	Reconsider mention of REACH in the conclusions.	Removed.

Lars Bromley	110	Conclusions – Conclusion 14	While many of our products are short term and become obsolete on their own I would say one of the primary contributions of UNOSAT has been slowly and steadily growing the appetite, awareness of, and willingness to use geospatial products. This is an incredibly slow, frustrating, and demoralizing process of course but it also seems to be the only technical capacity building works in this case: staff colleagues need to steadily see benefits for years and years before they consider this a tool in the tool box. The process is even slower as turnover in the rest of the UN can also be quite high. Our process with OHCHR has been a very good example of this.	Point reflected in the recommendations.
Lars Bromley	111	Recommendation 2	Suggestion on partnership with private companies: This might be quite dangerous and ill-advised. All of these companies have major defence / intelligence industry portfolios and our understanding of relevant licensing is poor at best.  On funding from OCHA: I think this should be pursued at very senior levels, the OCHA ASG can essentially require satellite imagery support in the flash appeals, as OHCHR started doing for their inquiries some years ago. Of course it may then open up those appeals for private sector tenders / competition.	Adjusted.
Lars Bromley	112	Recommendation 3	Double check if MoUs with Nvidia and Google are still active.  Also good to mention CERN there.	Added CERN. Nvidia and Google MOUs are still valid.
Lars Bromley	108	Recommendation 3	On interactive tolos: 'Live maps' are pretty standard for us by now, they are not always used as they take time to produce and many partners still prefer PDF.  On AI model development: We are quite involved in model development under the Disha project.	Added.
Beatriz De Souza	113	Annex I Case study 1	Suggestions for the presentation of the case study:  1. The description present in item 2 could be made into an infographic both to illustrate the case study for publication and for awareness raising so people can understand in practice how the products shared by UNOSAT support humanitarian response.  2. The case study features some of the outputs produced by OCHA using UNOSAT'S products would it be possible for UNOSAT to explore possibilities of either cooperating with its users in the production of these types of outputs or even expand its portfolio as to produce similar deliverables?	1. Noted and great idea. We will work on an infographic for the overall report. Maybe UNOSAT communication colleagues could help with an infographic for the case study.  2. That's a great idea. We have adjusted the

				recommendation on visibility accordingly.
Beatriz De Souza	114	Annex I Case study 2	Suggestion for the case study: Maybe there could be something added regarding how the case relates to the coordination-related outcome of the project? Cases like this and Gaza (the latter outside of the period of the report) show how UNOSAT can be a central point of reliable information in times of great crises. Moreover, I felt it ended kind of abruptly. I would add a conclusion	Added.
Lars Bromley	115	Annex I Case study 2	Observation: Note we currently have a REACH project working on Sudan which covers some of the same issues. And, I continue to update UNOCC and some aspects that I can easily assess such as potentially burned towns.	Added.
Beatriz De Souza	116	Annex I Case study 3	I think it would be good to mention what was effectively done with the info provided by UNOSAT.	Added.
Lars Bromley	117	Annex I Case study 4	One thing from past years discussion: we used to have a 'UN internal' publishing system, so all the non-public reports we produced were uploaded there for partners to access, which then also greatly assisted the reporting process. This system was short lived but might be worth considering to resurrect it (funds required).	Noted and recommendation added. And also integrated into recommendation on visibility above.
Luca DELL'ORO/ Olivier VANDAMME	118	Overall	Recommends considering that ESCAP is not really an end user of the mapping service nor a close partner as they do not have a common project. Most requests come from OCHA, not ESCAP. Suggestion re remove ESCAP and any other reference to preferential partners.	Please refer to Finding 22 on benefits from the EMS' Asia and Pacific team being co-located with ESCAP in Bangkok. I have changed the two relevant conclusions as follows: 10. For varying reasons, co-location with ESCAP, UNOCC, and CERN has proven beneficial. See Finding 22, Finding 23, Finding 24 & Finding 25

				<p>11. In addition, the Mapping Service benefits, and is of benefit to other organizations, including: OCHA, Copernicus EMS and REACH. See Finding 26, Finding 27 &amp; Finding 28.</p> <p>Removed ESCAP under Finding 6.</p>
Luca DELL'ORO/ Olivier VANDAMME	119	Likelihood of impact	<p>Recommends reviewing the point of short term versus the longer term impacts. He gave the example that some maps may be used later for training data. He also noted the long-term benefit of having the mapping service in place for 20+ years.</p>	<p>I have added the following paragraph to Conclusion 14.</p> <p>There are certain caveats to this conclusion: the normal project theory of change applies to the EMS' contribution to technology development, including the use of EMS products to train AI models; and the short-term saving of lives can have long-term impact based on what the people who were saved go on to do. There is also the point that the EMS has had long-term impact as a result of operating for 20 years. The latter is outside the scope of this evaluation which was asked to look primarily from the start of the current funding cycle in August 2022.</p>



Olivier VANDAMME/ Luca DELL'ORO	120	Likelihood of Sustainability	Recommends reconsidering the characterization of the funding strategy as "fragile". The predictability of UNOSAT service has been one of the strengths for over 20 years.	Changed Conclusion 18 to While relatively stable over the last 20 years the project's funding is reliant on a single donor – Norway. To better secure the projects' long-term sustainability, the EMS is seeking funding from other donors.
Luca DELL'ORO	121	Likelihood of Sustainability	Recommends adding solutions to strengthen the funding strategy.	I have deleted the sentence under Finding 42 as follows: An OCHA interviewee thought that should the project lose its Norwegian funding, the UN Disaster Response System would find a way to fill the hole. I have added the sentence: A number of ideas as to how to better secure and increase EMS funding are listed under Recommendation 2.
Beatriz Nazareth De Souza Teixeira	122	Relevance	Suggests mentioning SDG 11, at the time to talk about building resilient communities, specially target 11.5, which is related to Reduce the Adverse Effects of Natural Disasters.	Done.
Beatriz Nazareth De Souza Teixeira/ Olivier VANDAMME/ Luca DELL'ORO	123	Likelihood of impact	Suggest to adding a benchmark analysis, including organizations like the Red Cross, Copernicus, etc to demonstrate the value-added and cost effectiveness.	I am not clear what a benchmark analysis, and whether it is practical at this stage of the evaluation. Cost effectiveness is covered under Finding 30.
Luca DELL'ORO	124	Recommendations	Suggests including more technical comments relative to product types, methodologies, workflows, API, integration of other data sources, etc.	The evaluation followed the questions in the ToR. Given

				the expected readership includes non GIS people, we have tried to keep technical language to a minimum. Is there any particular question where a more technical discussion would be helpful?
Beatriz Nazareth De Souza Teixeira	125	Recommendations	Suggests including recommendations regarding raising awareness and addressing gender.	Recommendation 1 says "For the EMS' M&E facility to be a part of future inter-agency humanitarian evaluations of responses to natural disasters, to use the opportunity to include questions about the use of the EMS' products, in particular influence on decisions that concerned vulnerable groups (i.e. farmers, women, youth, elderly, etc.) in poorer countries. Answers to these questions should be used to inform future planning and awareness raising." Recommendation 4 is on benefiting vulnerable groups through training.
Manuel FIOL	126	Overall	Provide clarifications about differences between activations for conflicts versus disasters.	I have added the following sentence in the Box on the activation process: This process applies for humanitarian emergencies.

				In complex emergencies, the requesting agency may not want its request to be common knowledge, for example when they will involve satellite imagery of war zones. An OCHA employee commended the EMS for being appropriately discrete in these situations – see Box 3.
Luca DELL'ORO	127	Overall	Suggests to not refer to UN-Assign as this is not an assessment and hence not important to mention.	We were asked to look at whether the recommendations from the previous Independent Evaluation were carried out, one of which was that the EMS engage in user-based real-time impact assessment based on UN-Assign.
Luca DELL'ORO	128	Recommendations	Suggests removing reference to flash appeals as these come afterwards and UNOSAT's work usually before.	Flash appeals were mentioned in discussion of funding options. The caveat that they didn't work well are in the text of the report.
Luca DELL'ORO	129	KEY EVALUATION FINDINGS AND CONCLUSIONS	Suggest specifying (whether is possible) finding and conclusions in relation with feedback received for EM services provided during conflicts and rapid onset disasters.	The feedback received during interviews is anonymized and referenced throughout the report. We have also included information from the survey (only disasters as no contacts for conflict were available) and case

				studies. Is there anything in particular that needs strengthening?
Lars Bromley	130	Overall, sent by email	I added a relatively lengthy paragraph to the Executive Summary on the UN system and disaster and crisis response. As mentioned the repeated use of the phrase “UN’s Disaster Response System” seems focused on ‘natural disasters’ which my team doesn’t work on, and more broadly seems to imply a singular organizational system is at work across the UN which is not really the case. I belabor this point as our partners are essential in this process, we do not have the mandate to work on anything independently and thus we work on request for our partners. And, our partners are diverse despite all being in the UN system, for example a humanitarian-focused IMO in Indonesia is a world away from a P4 Coordination Officer in UNOCC, they just don’t work on the same things at all, or under the same processes and mandates. We ‘plug into’ them as best we can.	Added.
Lars Bromley	131	Overall, sent by email	I don’t understand why REACH is mentioned in this document, it occurs under entirely different funding. Can someone explain? We ran out of time to discuss this today so apologies for asking on email.	Adjusted.
Lars Bromley	132	Overall, sent by email	I myself would appreciate some text on the budgetary aspects. The document is very focused on natural disasters, and so is that how the budget is also focused? Or are we somehow misaligned vis a vis the budget?	Added.
Luca DELL’ORO	133	Overall, shared during meeting	Simplify language used on executive summary.  Try to reduce length of report and consider moving content to annexes.	Adjusted and infographic included.
Luca DELL’ORO	134	Overall, shared during meeting	Differentiate findings by conflict and/or disaster and specify when findings concern only one or the other.	All findings were reviewed and those only applying to one or the other were indicated as such.
Luca DELL’ORO	135	Overall, shared during meeting	Change “discrete” to “confidential”.	Adjusted.
Luca DELL’ORO and Oliver Van Damme	136	Overall, shared during meeting	Change “UN disaster response system” to “UN system responding to disaster”.	Adjusted.
Luca DELL’ORO	137	Overall, conclusion 7, shared during meeting	Correct that risks to loose analysts only applied for conflict, not disaster, where the team is stable.	Adjusted.
Luca DELL’ORO	138	Finding 42, shared during meeting	Revise risk of loss of funding and failure to meet requests.	Adjusted.

Luca DELL'ORO	139	Overall, shared during meeting	Clarify that HDX etc. are libraries of data only.	Adjusted.
Luca DELL'ORO	140	Overall,	Ensure EMS is referred to as a project and not as an institution/entity.	Adjusted.