

62nd NMRG Meeting

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Note Well – Intellectual Property

This is a reminder of IETF and IRTF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction.

- **The IRTF follows the IETF Intellectual Property Rights (IPR) disclosure rules**
- By participating in the IRTF, you agree to follow IRTF processes and policies:
 - If you are aware that any IRTF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion
 - The IRTF expects that you file such IPR disclosures in a timely manner – in a period measured in days or weeks, not months
 - The IRTF prefers that the most liberal licensing terms possible are made available for IRTF Stream documents – see [RFC 5743](#)
 - Definitive information is in [RFC 5378](#) (Copyright) and [RFC 8179](#) (Patents, Participation), substituting IRTF for IETF, and at <https://irtf.org/policies/ipr>

Note Well – Audio and Video Recordings

- The IRTF routinely makes recordings of online and in-person meetings, including audio, video and photographs, and publishes those recordings online
- If you participate in person and choose not to wear a red “do-not-photograph” lanyard, then you consent to appear in such recordings, and if you speak at a microphone, appear on a panel, or carry out an official duty as a member of IRTF leadership then you consent to appearing in recordings of you at that time
- **If you participate online, and turn on your camera and/or microphone, then you consent to appear in such recordings**

Note Well – Privacy & Code of Conduct

- As a participant in, or attendee to, any IRTF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public
- Personal information that you provide to IRTF will be handled in accordance with the Privacy Policy at <https://www.ietf.org/privacy-policy/>
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<https://www.ietf.org/contact/ombudsteam/>) if you have questions or concerns about this
- See [RFC 7154](#) (Code of Conduct) and [RFC 7776](#) (Anti-Harassment Procedures), which also apply to IRTF

Goals of the IRTF

The IRTF conducts research; it is not a standards development organization

The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organization, the IETF, focuses on shorter term issues of engineering and standards making.

While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology.

See “An IRTF Primer for IETF Participants” – [RFC 7418](#)

Online meeting etiquette

- **The session is being recorded.**
- Please keep your audio muted and video off when not presenting/speaking.
- When speaking, please start by stating your name and any affiliation
- **Useful links:**
 - Materials: <https://datatracker.ietf.org/meeting/interim-2021-nmrg-03/session/nmrg>
 - Webex: <https://ietf.webex.com/ietf/j.php?MTID=mf4f7414b4e2928cf35fb18b957a29c50>
 - Notes: <https://codimd.ietf.org/notes-nmrg62#> **(Please add your name to the participant list)**
 - Video recording: <https://www.youtube.com/user/ietf/playlists>

Objectives (Agenda)

- Meeting (+ one week feedback on the mailing list)
 - Freeze the challenge list
 - Set the expected content type and levels of details for challenges → template
 - Define one lead contributor per challenge
 - Set milestones for progressing on the document

Listed challenges

	Contributors identified	Content provided
Lightweight AI	Jérôme, Lisandro, Jéferson	++
Data accessibility	Roberto	
Problem type and mapping	Stefan	+
Human in the loop	Lisandro	
Acceptability of AI for NM	Roberto, Lisandro	
Data labeling	Dimitri, Jéferson, Ramin	+
Online monitoring and control of the quality and properties of estimators	Dimitri, Jérôme, Jéferson	+
IBN-1: interpreting high-level or natural language intents (NLP/NER) and generation of intents	Abdelkader, Lisandro, Jéferson	+
IBN-2: planning of actions	Alex, Marinos, Lisandro	++
AI for Exploiting External Events	Pedro	+
Commercialization of AI-based products	Albert, José	++
Explainability of Network-AI products	Albert, José, Jefferson, Stenio	+
Scalable real-time monitoring	Marinos, Lisandro, Jefferson, Ramin, Stenio	+
Generating networks for tests, experimental studies,...	Ramin	

Current description level

	Motivation (Why?). Highlight it not an artificial challenge but due to a real need	Advances / SotA in regards to the motivation with refs	(Sub)challenge description (current limitations to progress on a scientific, technological ... point of view)	Suggested solution(s)
Lightweight AI	X	X	X	~
Data accessibility				
Problem type and mapping	~			X
Human in the loop				
Acceptability of AI for NM				
Data labeling	~		~	
Online monitoring and control of the quality and properties of estimators	X			
IBN-1: interpreting high-level or natural language intents (NLP/NER) and generation of intents				X
IBN-2: planning of actions			X	
AI for Exploiting External Events	X		~	
Commercialization of AI-based products	X		X	X
Explainability of Network-AI products	X	~	~	
Scalable real-time monitoring	X		~	
Generating networks for tests, experimental studies,...	~			

Template

- Proposition:
 - **Motivation**
 - Highlight the criticality/impact of the problem to be addressed
 - **Current SotA**
 - current proposals / trends based on reference/survey
 - **Detailed description of the sub(challenges)**
 - Highlight what are the remaining issues to be resolved from the previous SotA
 - **Feedback?**
- Keep in mind
 - Provide references (motivation, SotA, potential solutions)
 - All challenges are on different type
 - AI to solve a NM problem
 - AI problem when we use AI for NM
 - N(M) to support a better AI → not really represented in our doc (**should we keep for another iteration?** e.g. using NM to better support AI processes)

Writing the challenges

- Transform the google doc in ID
 - Keep both docs in parallel
 - Important: ID → some of contributors could be put as acknowledgement
- Modify and freeze (do not extend) the list of challenges
 - Avoid IBN-specific challenges → proposition:
 - Challenge #1: Intent/policy generation and planning of actions
 - Challenge #2: “Non-technical/NM” data (NLP) → combine with external events?
 - **Feedback?**
 - Data accessibility (before applying any AI) is multi-faceted (so we will have subchallenges)
 - Merge with scalable real-time monitoring
 - **Feedback?**
- Identify one main contributor per challenge
 - All can directly contribute to the doc
 - Main contributor in charge of consolidating inputs/comments
 - **Volunteers?**

Listed challenges (proposed update)

	Contributors identified	Content provided
Lightweight AI	Jérôme, Lisandro, Jéferson	++
Data accessibility (incl. scalable real-time monitoring)	Roberto, Marinos, Lisandro, Jefferson, Ramin, Stenio	+
Problem type and mapping	Stefan	+
Human in the loop	Lisandro	
Acceptability of AI for NM	Roberto, Lisandro	
Data labeling	Dimitri, Jéferson, Ramin	+
Online monitoring and control of the quality and properties of estimators	Dimitri, Jérôme, Jéferson	+
IBN-1: interpreting high-level or natural language intents (NLP/NER) and generation of intents	Abdelkader, Lisandro, Jéferson	+
Policy/intent generation and planning of actions	Alex, Marinos, Lisandro, Abdelkader, Lisandro, Jéferson	++
AI for Exploiting External and Non-Technical Data	Pedro, Abdelkader, Lisandro, Jéferson	+
Commercialization of AI-based products	Albert, José	++
Explainability of Network-AI products	Albert, José, Jefferson, Stenio	+
Scalable real-time monitoring	Marinos, Lisandro, Jefferson, Ramin, Stenio	+
Generating networks for tests, experimental studies,...	Ramin	

Timeline

- June 30
 - Main contributor identified
 - List of challenges identified
- July 18
 - One or two challenges as example(s)
 - With many contributors
 - Data accessibility (incl. scalable real-time monitoring) or Policy/intent generation and planning of actions
- September 07
 - All challenges described according to the template with equivalent level of details as examples
 - Introduction refined according to current comments (AP Jérôme)
- **Feedback?**