



# ELIXIR Beacon Strategic Calls Minutes and Actions Q3, 2018

A GA4GH Discovery Work Stream Subgroup

These are the minutes for the Beacon meetings, a driver project of the GA4GH Discovery Work Stream. For further information, please visit the GA4GH Work Stream page at <a href="https://ga4gh.org">https://ga4gh.org</a>. (See also the <a href="https://ga4gh.org">Vision</a></a>Statement and recent <a href="https://ga4gh.org">Activities</a>)

Other minutes documents are available:

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2018-09-25: Tech. Call

Jordi, Saif, Juha, Sabela, Tony, David Update & notes in these slides

Saif: last call before moving to a new role with GeL. (Will be in Basel next week.) GA4GH service registry - almost a plug&play element? Maybe avoid developing new.

Tony: Is there a Service Registry group? Jordi: Part of the GA4GH Discovery WS.

Extensive list of intentions, need to confirm spec is compatible with Beacon.

Unclear who is managing the network within Beacon. (WP2?)

Juha: Next step?

Jordi: See the Network Specification finished and build on that.

Open specification?

Need to remove the end point to make it open.

More like a registry, a list of Beacons (aggregator)

P2P arrangement - a beacon needs to know what is out there (each Beacon constantly broadcasting?)

Concern several different groups considering this with different models - opportunity / responsibility to coordinate this and bring all together for a single solution.

Jordi: Additional person soon

Saif: Security Work. Will need to look at the PR and documents. (From Feb 2018)

Juha: Sweden are planning to get more involved, hopefully pick up some of Saifs work.

Looking to pick up the AAI demonstration from GA4GH meeting

Al: Juha to invite these developers to join the Slack channel and then arrange a call.

Juha: GA4GH Security review TC on Friday - not yet approved but all issues were addressed.

Content of an email from Jordi to the GA4GH Discovery Network:

In preparation for the discussion on tomorrow's call, and looking at the action items from the last one, there was a suggestion to extend the requirements for networks to better accommodate the core supported projects, Beacon Network (where we're diverging between the needs of the current implementation and future ELIXIR implementation), DOS, and Reference Sequence Retrieval, and write them down. As a starting point, we have these resources:

- · specification proposal
- · reference implementation
- Review of the above + requirements doc.

## 2018-09-18: NKI Use Case

**Chair**: Gary

Attendees: Jordi, Dietlind, Dylan, Heidi, Miro, Sabela, Stephanie, David

Regrets: Michael B.

	Actions Arising	Assigned To	Deadline
1.			

	Agenda Item	Speaker	Time
1.	Approve previous minutes and confirm Agenda	Chair	5 min
2	Review of Actions (None)	David	10 min
3.	Technical <u>Update</u>		5 min
4.	GA4GH workshop Agenda (Full Plenary Agenda)		5 min
5.	GA4GH Security review (arrange TC with DNAcompass)		10 min
6.	<ul> <li>● Plenary meeting Agenda</li> <li>○ What demos are we expecting?</li> <li>○ ELIXIR CSC Beacon</li> <li>○ Google Beacon?</li> <li>● Security paper outline</li> <li>● Engagement TC - minutes</li> <li>● Discovery Network (13th Sept)</li> <li>○ Project requirements and plan</li> <li>● DURI (12th Sept) notes</li> <li>Plenary plans &amp; Demo updates</li> <li>● RI/AAI - demo plan, RI spec</li> <li>● DUO - draft plan for presentation</li> </ul>		10 min
7.	Schema examples (ClinPhen group, Phenopackets) (rolled over to next call)  • First draft of schema elements on Github		
8.	<ul> <li>CORBEL NKI Use Case update &amp; GeL</li> <li>Follow up from presentation (Aug).</li> <li>Mariska will be attending Plenary meeting.</li> </ul>	Gary	5 min
9.	A.O.B?		10 min
10	Forthcoming activity: 25th Sept Technical Call 2nd Oct Strategic Call Cancelled (GA4GH Plenary)		

	Previous Actions	Assigned	Deadline	Update
1.				

Notes:

# 2018-09-04: Conference Workshops

Chair: David

Attendees: Ilkka, Michael, Jordi, David, Gary, Dylan, Dietland, Stephanie, Niclas, Malin, Sabela,

**Regrets**: Gary

	Actions Arising	Assigned To	Deadline
1.			

	Agenda Item	Speaker	Time
1.	Approve previous minutes and confirm Agenda	Chair	5 min
2	Review of Actions (below)	David	10 min
3.	Technical <u>Update</u>		
4.	Forthcoming Workshops:  • ECCB <u>Agenda</u> and <u>Registration</u> • GA4GH <u>Agenda</u>	David	5 min
5.	GA4GH Security review		
6.	GA4GH Update:  • Plenary meeting Agenda • Security paper outline • Discovery (29th Aug x 2) • DURI (12th Sept) • Security (16th Aug)		
	Aligning version numbers #201	Jordi	
7.	A.O.B?		
8.	Forthcoming activity: 11th Sept Technical Call (tbc) 18th Sept Strategic Call		

	Previous Actions	Assigned	Deadline	Update
1.	DURI demo for GA4GH Plenary	Dylan	Next strat.	ELIXIR AAI using CSC Beacon as research demonstrator
2.	Intern: Advert to be circulated	David		Done. Details <u>here</u> Clarified: Individual rather than subcontractor / company
3.	Confirm speakers for ECCB workshop Agenda	David		All but one
4.	GA4GH Plenary F2F / social event	David		

## Notes

Beacon people attending GA4GH Plenary:

Ilkka, Michael, Jordi, David, Gary, Dylan, Dietland, Stephanie, Niclas (also Marc)

Malin: Systems developer working on Swedish Beacon, part of the current Implementation study.

Sabela: Technical Update

- GA4GH Security review report pending (DNAcompass Security consultants.)
- Consent Code release
- Extent current sprint to 11th Sept due to annual leave.

Beacon Version numbers: Agreed to align with GA4GH versioning.

#### AOB:

Michael Future Beacon Protocol extensions - longstanding but not clear who is picking this up (BioData etc) GA4GH Discovery API suggests Beacon is lagging behind.

Jordi Are domains mature enough to move forward?

Michael Simple query able to interrogate a Biodata (Ontology class endpoint)

ClinPhen group, Phenopackets - consider how this would look?

Need to know the underlying object, how to query sample-related data, already considered.

The EGA might require reference datasets

Jordi Generic query, could apply to concept goals

Michael will pull together some schema examples for next Strategic call

Own development or under Clinical Phenotype WS

Jordi Ontology & ontology variant, need to define the field it will apply to (genomic feature etc)

Michael Or scoping the prefix, guiding towards the query. Or specific limitation.

Or query for person (GWAS study, germline)

Jordi Any action following up on the Corbel presentation? (7th Aug see below)

A potential Clinical use case - suggest review this at the next call.

Jordi Email thread regarding GA4GH announcement (picked up)

GA4GH Search API - another product pending approval at the GA4GH Plenary

Preliminary response from Security review by DNAcompass, on behalf of GA4GH Data Security WS:

"The amount of documentation and thought that has gone into the application is very impressive. That said, the spec describes the implementation of REST over HTTP as the primary Design Principle with three tiers of access. Three level access tiers: Open, Registered and Controlled.

- Open: no authorization (verification of access rights) or authentication (verification of identity) is performed.
- Registered: authentication of the user is performed (in the case of ELIXIR verification of 'bona-fide' researcher status is performed)
- Controlled: both authentication and authorization checks are performed.

OPEN with HTTP instead of HTTPS is a huge security risk. We wouldn't recommend using it - unless you mean something different by OPEN that what I imagine. We'll need to learn more about your goals for the security review.

Alice

This sounds like an issue that arose around htsget. The <u>discussion</u> centred localhost (i.e. internal) instances of servers providing data, for which https was not needed. The solution was to stipulate a https requirement for 'transmission over open connections'. This may be a solution, but I will let the Beacon team members provide further clarification,

Regards Rishi"

## 2018-08-21: Forthcoming conference preparations

**Chair**: Gary

Attendees: Michael, Ilkka, Venkata, Marko, David

Regrets:

A	ctions Arising	Assigned To	Deadline
	ern: Ivert to be circulated	David	
	ould it be possible to be based at Node rather than Hub?		

2.	Confirm speakers for ECCB workshop Agenda	David	
3.	GA4GH Plenary F2F / social event	David	
4.			

	Agenda Item	Speaker	Time
1.	Approve previous minutes and confirm Agenda	Chair	5 min
2	Review of Actions (below)	Gary	10 min
3.	Beacon 2019-21 Project Plan  - Sent for review by HoN  - Additional funding possible for exploratory phases of plant and proteomics work packages  - Emails sent to leads  - (Possible meeting at ECCB)	Gary	10 min
4.	Technical <u>Update</u>	Gary	5 min
5.	Beacon internship at ELIXIR-Hub	Gary	5 min
6.	ECCB workshop Agenda Registration	Gary	5 min
7.	GA4GH Plenary Agenda	Gary	10 min
8.	GA4GH Update:  Plenary meeting - our own F2F/Dinner? Security paper outline Discovery DURI Security Clin/Phen Example Catalog entry	As appropriate	10 min
9.	A.O.B?		
	Forthcoming activity: 28th August Technical Call 4th Sept Strategic Call		

	Previous Actions	Assigned	Deadline	Update
1.	DURI demo for GA4GH Plenary	Dylan	Next strat. call	In preliminary agenda
2.	GA4GH Plenary materials review	Gary	Next strat. call	Sent to printers

## 3. 2019-23 Project Plan

Potential funding within excellerate - an exploratory project (8 months) to explore possible non-human Beacon with a view to further funding applications.

- Plants, led by Macha Nikolski (ELIXIR-FR)
- Proteome Juan Antonio Vizcaino (ELIXIR-EBI)
- 4. Technical Update:
  - Next sprint to 4th Sept due to holidays and other commitments
  - Saif working on specification
  - Miro: Support for DOS within API
  - Both reportedly making good progress
- 5. Intern.
  - Picking up a discussion from ~2017
  - Developer; the exact project will depend on the applicant
  - Possibly based at Node not Hub? (Or eligible for staff exchange program?)

- Previous experience suggests no applicants
- 6. ECCB agenda, potential additional speakers:
  - Bo Gao (Beacon+)
  - Jacek Lebioda (Python implementation)
  - Tommi Nyronen (Plenary style, future of data discovery, AAI commitment)
- 7. GA4GH Plenary proposal for F2F / Social event (probably the evening of Wed. 3rd)
  GA4GH activities a lot of focus on Products being approved by Plenary meeting. Security assessment
  Bottleneck, now appointed a consultant to address things. Expect a report shortly, may require further actions.

Beacon now included in the Clin/Phen Workstream Example Catalog entry

## 2018-08-07: Corbel Use Case

**Chair**: Gary

Attendees: Dietlind, Dylan, Ilkka, Joel, Juha, Mariska, Miro, Niclas, Sabela, David, Tony

Regrets: Jordi, Michael

	Actions Arising	Assigned To	Deadline
1.	DURI demo for GA4GH Plenary	Dylan and Juha	Next strat. call
2.	GA4GH Plenary materials review	Gary	Next strat. call
3.			

	Agenda Item	Speaker	Time
1.	Approve previous minutes and confirm Agenda	Chair	5 min
2	Review of Actions (below)	Gary	5 min
3.	Beacon 2019-21 Project Plan	Gary	10 min
4.	Beacon Corbel Use Case slides See also http://trait.health-ri.nl/trait-tools And https://catalogue.bbmri.nl/ Notes below.	Mariska	20 min
5.	Technical <u>Update</u>	Gary/Juha	5 min
6.	<ul> <li>GA4GH Update</li> <li>Security paper (connected to ISMB poster)</li> <li>DURI - Dylan         <ul> <li>Presentation <u>DUO update</u></li> </ul> </li> <li>Discovery Network         <ul> <li>Tony reports query API email threads - conclusion: Discovery Group: focus on datasets; creating agreed metadata elements</li> </ul> </li> </ul>	As appropriate	10 min
7.	ECCB workshop Registration details to be circulated	Gary	5 min
8.	Forthcoming activity: 14th August Technical Call 21st August Strategic Call		

1.	Completed Paper to be submitted	Gary	Next Strategic call	With Marc Fiume
2.	Beacon project plan 2019-21	WP Leads	COP 27th July	Complete, sent for external review
3.	Non-human / non-genomics funding for Beacon from somewhere	Gary	Next Strategic call	Looking good for plants; Proteomics to be discussed
4.	Security GA4GH call	David (others interested please email)	3 August	Outline of paper looking at wider GA4GH Security, draft to be made available in time
5.	DURI - expect contact from Stephanie to Juha/Mikael/Dylan/Hub	Dylan	Next Strategic call	
6.	Comments on GA4GH Plenary materials	Gary	COP 30th July	DONE

#### Notes:

Corbel Beacon - aiming to build a network of Cancer databases across 6 European centres

Initial use case non-breast BRCA 1&2 Give a basic answer: "Yes (4 examples)"

User can then apply for Data Transfer Agreement (DAC)

See Paper: https://www.nature.com/articles/s41431-018-0219-y

Registered User interface

Designed to be user-friendly for clinicians

Joel: <a href="http://biobanks.dk/">http://biobanks.dk/</a> Danish Biobank

An approach that limits response according to a threshold (min. 3 or 5 individuals)

Also in Sweden, <a href="http://www.biobanks.se/">http://www.biobanks.se/</a>

Both demonstrate it is possible to share data within the national legal framework.

Tony: Others allow data owners to set threshold (eg. DAC may require 20 individuals) Important to limit to registered users and log the activity.

BBMRI & GA4GH input into this work

Here's the BBMRI effort to standardise this around vendors: link

Especially

- Metadata standardised way to represent terms, variants, etc
- Networks and infrastructures
- Collate best practise

## 2018-07-24: 2019-21 Project Plan

**Chair**: Gary

Attendees: Jordi, Tony, Dietlind, Dylan, David, Ilkka, Juha, Sabela, Marko, Michael B, Tony,

#### Regrets:

	Actions Arising	Assigned To	Deadline
1.	Completed Paper to be submitted	Gary	Next Strategic call
2.	Beacon project plan 2019-21	WP Leads	COP 27th July
3.	Non-human / non-genomics funding for Beacon from somewhere	Gary	Next Strategic call
4.	Security GA4GH call	David (others interested please email)	3 August
5.	DURI - expect contact from Stephanie to Juha/Mikael/Dylan/Hub	Dylan	Next Strategic call
6.	Comments on GA4GH Plenary materials	Gary	COP 30th July

	Agenda Item	Speaker	Time
1.	Approve previous minutes and confirm Agenda	Chair	5 min
2	Review of Actions (below)	David	5 min
3.	GA4GH Beacon API v1.0.0 Product Review Committee process.	Michael	10 min
4.	Beacon 2019-21 Project Plan	Gary	15 min
5.	Technical <u>Update</u>	Gary/Juha	5 min
6.	<ul> <li>GA4GH Update</li> <li>Security paper (connected to ISMB poster)</li> <li>DURI 18th July - Dylan</li> <li>Discovery Network 19th July - Jordi</li> <li>Plenary meeting update (Gary) materials (deadline: COP 30th July)</li> </ul>	As appropriate	10 min
7.	Beacon Paper update & ECCB workshop	Gary	5 min
8.	Forthcoming activity: 31st July Technical Call 7th July Strategic Call		

	Previous Actions	Assigned	Deadline	Update
1.	Updated Networks stats from DNAstack to complete paper	Gary	ASAP	Received
2.	Review Press Release	All	COP 12th July	On hold until Security review
3.	Next Beacon Paper	Jordi		Security based?

## Notes:

GA4GH Beacon API v1.0.0	Security Questionnaire completed, to be considered by Dixie Baker, may require the development of a Security doc.)	
Product Review GA4GH v1.0.0 - discussions more about GA4GH process rather than Beacon submission.		
process.	In future need greater clarification / preparation as to who will address which area (eg. Network / Security) ideally the person who has been working on it most recently.	
Beacon 2019-21 Project Plan	Focus encouraged on definitions in the work packages: WP6 & 7 to be moved to a different document - different funding source, not under Human Data Communities	
	WP2, 3 (Juha, Dylan, will both complete input by the end of the week) WP4 - co-leaders Michael & Gary	
	Encourage input from all, good to see comments being accepted, clean up the text.	
	Jordi: Clinical Beacon - significant need, should be included in the plan Ilkka: a separate WP or included in WP1?	
	Jordi - Agree, good to make it clear in the proposal	
	Michael - separate clinical requirement ? Possibly WP4, under national initiatives, although a separate WP would be cleaner.	
	Gary - agree to reshape WP4 to include all outreach work.	
Technical <u>Update</u> (See below)	Focus moving to Elixir beacon Network development, aim to complete Network specification	
	Minor issues on 1.0 release to be resolved.	
GA4GH Update	Security paper (connected to ISMB <u>poster</u> )  TC 20th July, treat poster as White Hat attack, develop a GA4GH Security position paper - effective security enables safe sharing of data  Consider stronger links with iDash challenge. (Next TC to be arranged)	

	DURI 18th July - Dylan Looking to align the GA4GH and ELIXIR <i>Bona Fide</i> researcher. Stephanie dealing with the progress (last minute). If nothing from Stephanie before next Strategic meeting we'll reach out. Discovery Network 19th July - Jordi Discussions about GA4GH internal processes Preparing flyer & banner - Beacon v1.0.0, etc link (by COP 30th July) materials
Beacon Paper update & ECCB workshop	Rolled over

## 2018-07-17: Technical Call

Present: Juha, Sabela, Saif, Gary, Miro, David

#### Notes:

- Details of sprint review and sprint planning in the <u>slides</u>
- GA4GH Steering Committee to vote (17th July) on the Beacon v1.0.0 spec. Approval will be pending security plan (Draft is awaiting comment from Dixie Baker of the GA4GH security Work Package)
- All-Hands talk to be re-recorded due to low sound quality.
- GA4GH Webinar (14th Aug) to be presented by Marc, Juha, Miro.

## 2018-07-10: API v1.0.0 Product Review update

Chair: Gary

Attendees: Michael, Jordi, David, Juha, Dylan,

### Regrets:

	Actions Arising	Assigned To	Deadline
1.	Updated Networks stats from DNAstack to complete paper	Gary	ASAP
2.	Review Press Release	All	COP 12th July
3.	Next Beacon Paper	Jordi	

	Agenda Item	Speaker	Time
1.	Approve previous minutes and confirm Agenda	Chair	5 min
2	Review of Actions (below)	David	5 min
3.	GA4GH Beacon API v1.0.0 Product Review Committee process.  Committee reviewed the YAML file and Spec.md file, recommend approval to the steering committee who meet next Tuesday (17th). Michael & Marc to attend.  • API review process  • Anything to follow up on? (CNVs, ME, ALU?) (Questions as to how repeat regions are handled.)  • REWS questionnaire  • Security questionnaire  • Completed. Thanks to Dylan.  • Press release (comments/edits by COP 12th July)  • Michael & Jordi to review content  • Clarify: Beacon 'demonstrates' AAI rather than 'implements'  • Expected actions	Gary	10 min
4.	Beacon 2019-21 Project Plan  ■ DEADLINE: end of July  □ 6 Work Packages  □ Agreed to update this, add content, review on next TC  ■ Concern that security issues might stifle network developments,	Gary	15 min

	<ul> <li>Look to establish a number of small, closed (trust) networks to develop network API, searches etc.j</li> <li>ELIXIR-NL (network of 4 hospitals)</li> <li>SolveRD (Sergi Beltran has expressed an interest)</li> </ul>		
5.	Technical <u>Update</u> • Focus has been on the <u>API PRC</u> • Next work will be on Network implementation so that we <u>remain on-track</u>	Gary/Juha	5 min
6.	<ul> <li>GA4GH Update</li> <li>Updates from calls in the past weeks (see <u>list</u> for calls &amp; involvement)</li> <li>Request from Rishi - hot off the press - for representative at 10pm BST tomorrow(11th) on the Discovery WS call - Michael</li> <li>DURI 18th July - Dylan</li> <li>Discovery Network 19th July, 5pm CEST - Jordi</li> </ul>	As appropriate	10 min
7.	Beacon Paper update Updated Network (DNAstack) statistics from Marc / Miro. Press release to be the start of writing another paper, Jordi to take the lead.	Gary	5 min
8.	Beacon mailing lists (GA4GH-dwg-beacon@ga4gh.org is now beacon@ga4gh.org) Moves not complete, mailing list updated, thanks for your patience.	David	5 min
9.	Forthcoming activity: 17 July Technical Call 24th July Strategic Call		

	Previous Actions	Assigned	Deadline	Update
1				

Notes written within the agenda document