Russia R&D Lab January report

I.   **Highlights(Jan.~Feb.)**

II.   **Main issues and discussion**

Reporter: xxxResponsibility

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Life's Good

1. January / February Highlights

- Actualization and alignment of short (quarter) and mid-term (year) development scope with the Company / CTO PRM / TRM

January Main tasks

- Enhancement of 3D Digital Human for Distant Services

  . XXXXX (TBD)

- [New] Started development of AI-driven Passenger Behavior Recognition by In-Cabin Camera

  . To provide 1st demo of detection Fastened Seat Belts in 1Q

- Ongoing enhancement of Security Architecture for Connected IVI Platform (CIP[1])

  . Secure Services for TrusZone Execution Environment (1Q)

  . Authentication procedures for connected processes (2Q)

  . Tool for Application verification and signing (for developers) (3Q)

- webOS Reference Platform and "Neva Web Framework

  . Focus on webOS TV upgrade to Chromium v.94 in 1Q

  . Rolling upgrade of "Neva" Framework to the latest Chromium
     To be applied to future webOS Web Core upgrade

February Main tasks

- xxxxx

- To ensure successful PoC of RF based Touch Screen solution for big size TV / Signage screen   With iLab

  . Initiated as Ideation PJT in `21.4Q to check feasibility of accessory-type Touch Screen for big size TV / Signage

  . iLab plans to present PoC to HE Company in Feb. If HE decide to continue development, Russia R&D Lab is expected to be involved
     iLab has preliminary secured budget for Russia R&D Lab

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- There is a number of requests to apply Russia R&D Lab expertize to enhance the pre-agreed PJT or to start new PJT

- Enhancement of AI-driven algorithms for Scalp / Hair Health diagnostic   The PJT is funded by B2B Advanced Tech Center

 . In `21, Russia R&D Lab prototyped a device and a number of algorithms for Scalp / Hair Health diagnostic. The solution was successfully tested in a number of Beauty shops

 . In `22, Russia R&D Lab is expected to develop AI-driven 3 algorithms for Automatic measurement of Scalp / Hair Health parameters. The HC Plan and budget was pre-agreed

 . In Jan, B2B Advanced Technology Center has requested to check possibility of extension number of algorithms to be developed (3 → 6 algorithms)

 . Russia R&D Lab has the expertise and there is OI Company to support the development, but the earlier secured OI budget to be increased

- [New] iLab has plans to utilize Russia R&D Lab expertize in development WebRTC Communication solutions to Golden Eye PJT

 . Russia R&D Lab has strong expertize in development WebRTC communication solution and related differentiating features in cooperation with BS Company

 . Basic features are ready-to-use (e.g. infrastructure, multi-user video call, chat, rooms), and Russia R&D Lab can check the compatibility with Golden

 . A number of differentiating features requested by iLab were prototyped as a separate applications and could be ported to as a Golden Eye H/W Platform but require additional efforts (24MM estimated)

 . Now, Russia R&D Lab negotiates with iLab to clarify the expectations and goals for the Golden Eye PJT
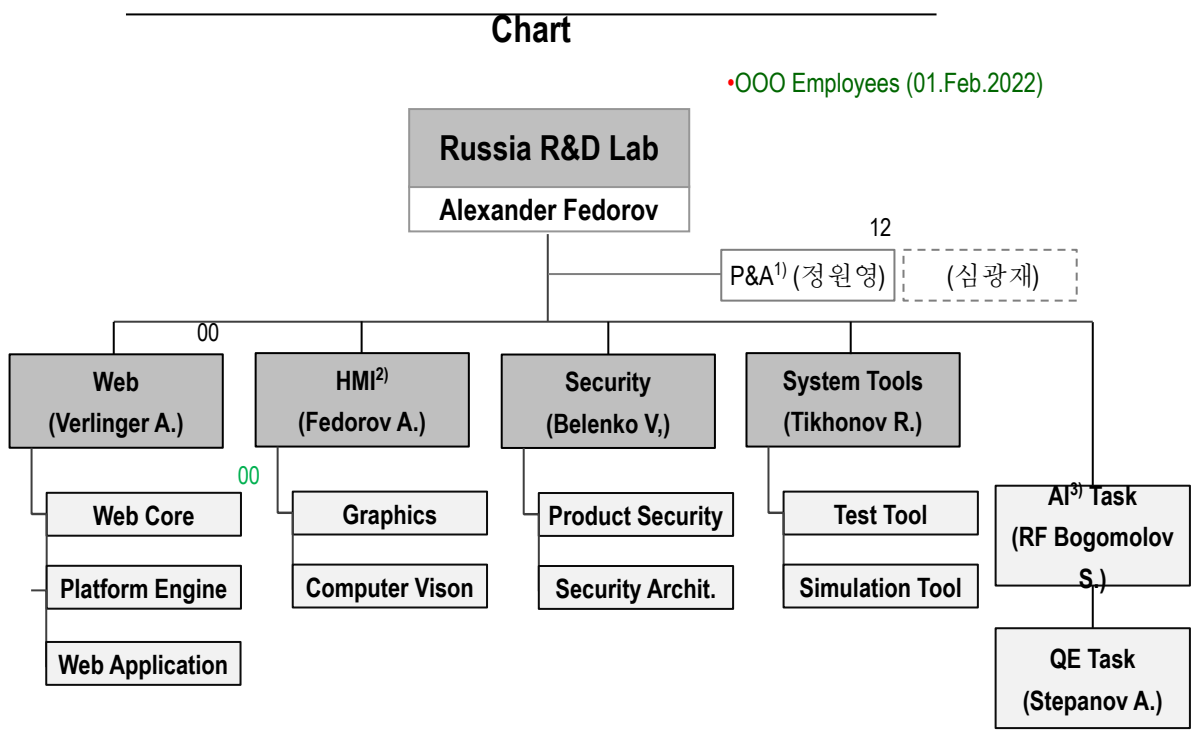
 . As the Golden Eye PJT is considered as CTO Top 10 PJT, it could be worth to secure the additional budget for Russia R&D Lab for applying the WebRTC expertise to the PJT. Even though HC Plan limitation, Russia R&D Lab can involve the OI or Out-Staff resources

Appendix 1. Organization Chart and HC Information

- Organize your organization chart

and headcount statistics

Organization Chart

•OOO Employees (01.Feb.2022)

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                    │   Russia R&D Lab    │
                    │  Alexander Fedorov  │
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                    P&A¹⁾ (정원영)      (심광재)
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Web (Verlinger A.)	HMI²⁾ (Fedorov A.)	Security (Belenko V,)	System Tools (Tikhonov R.)	AI³⁾ Task (RF Bogomolov S.)

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- Web Core
- Platform Engine
- Web Application
- Graphics
- Computer Vison
- Product Security
- Security Archit.
- Test Tool
- Simulation Tool
- QE Task (Stepanov A.)

Headcount in Russia(Jan.)

- HC is organized in the following format

		Head Count [person]
Full-time	R&D	
	Staff/common	xx people (HRx, Planning x, IT x, etc.)
	sub Total	
contract worker	R&D	
	Staff/common	
	sub Total	

1) Planning & Administration, 2) Human – Machine Interface, 3) Artificial Intelligence

Appendix 2. List of Assignments

Project Title	PL	Head Count [number of people]	fund organization	cost [KRW billion]	domestic partner (Organization and Name)	major milestone	note (Drop, change, etc.)
▪ Project Title			XxHQ head office CTO_xxCenter		xx center xx lab xx team Xxresponsibility	- Gate review, major development schedule, commercialization schedule	