

List of exhibitions “docomo R&D Open House 2017 in TOKYO”

Category	No.		title(official)	outline(official)
Living	A	1	The artificial intelligence robot : ATOM	"ATOM" is a "Japan's first, evolving full-scale character-type communication robot" that can speak, walk bipedally, and being grown up by a cloud. We made and modeled it based on the world-famous comics & animated cartoon, "Astro Boy" of Osamu
Living	A	2	The "Linking" - IoT platform for simple and easy linking -	This is an IoT platform that allows applications in the smartphone tablets to cooperate with Linking devices through Bluetooth. It is also possible to cooperate the information received by the sensors of the devices.
Living	A	3	The "petoco(pétookəo)" - Home communication device to tie family members -	This is a home device which supports happy and usefully inter-family -member communication beyond age barriers and regardless of physical distance.
Living	A	4	Magic white board : "TOMOKAKU"	This is a simple device which could be used as if it were a regular white board. Because drawn objects are sent As/Is through the Internet immediately, anyone can use and play with them easily.
Living	A	5	The "Mierudenwa" - Getting rid of uneasiness of "not being able to hear" and making conversation reliable-	We introduce the "Mierudenwa" service which automatically converts a caller's spoken words into text in real-time. You can also look at a new function (i.e. input letters are transported to a partner by sound) that was added based on requests from consumers.
Living	A	6	The new UI for smartphones	We introduce three new types of input methods based on traditional smartphones. You can enjoy VR and games more than before. Let's enjoy the hands-on experience.
Living	A	7	The feelings recognition - Recognizing feelings in your voice -	We introduce you to a feelings recognition technology that detects feelings of talkers by analyze their voices. Let's enjoy the exhibition of the service concept: a car navigation system senses the feelings of the driver and supports happy and safe driving. You can also experience the demonstration of the feelings recognition technology in a game-like setting.
Living	A	8	The project of future home - Supporting comfortable and healthy life with AI and IoT -	We collect and visualize various life states including relaxation levels and active mass of residents by using the IoT smart home™ in which IoT devices or sensors are installed. Through AI and IoT, an attention is given based on the states of the residents and future home is realized by automatically adjusting to a comfortable and healthy indoor environment.
Living	A	9	AI agent platform	We have opened up the "multipurpose dialogue service platform" aiming to "provide interactive AI to any objects". It consists of three engines: Speak; Manages conversation, Sense; Notifies suitable information by anticipating future activities, Symphony; Controls the IoT devices.
Living	A	10	Gesture Control Information Wall - Personalized screen which can be operated by gesture control -	This is a system that displays the most suitable information on a screen based on the situations of each user, and it enable the user to operate from remote places without having to use any devices. We provide comfortable user experience by enhancing the operability of the gesture operation.
Living	A	11	Life-size video call by meeting the other party's eyes	This is a video call system that enables you to talk to the other party displayed in life-size by meeting their eyes. By collaborating with smartphones, the experience of talking while watching a photograph together is also enabled.
Traveling	B	1	Free riding opportunity on AI driving bus	The AI driving bus is a structure of a new transportation that fuses advantages of taxis and route buses. In the Odaiba area, we experimentally offer an "AI driving bus" free-of-charge. Please call it through the application, and use it as a means of transportation in the area.
Traveling	B	2	The AR translation of cooking recipes	This is an application that enables you to watch the image photographs of dishes as well as their detailed translated information when you place a camera over the menu in a foreign language.
Traveling	B	3	The touch and converse	This is an application to enable accurate and near real-time communication with foreign visitors to Japan by touching fixed-form sentences. It is available for various scenes, because you can set the fixed-form sentences for different user scenes.
Traveling	B	4	The tour-talk-training VR	You can learn a foreign language as if you were overseas talking to the locals.
Traveling	B	5	NTT DOCOMO smart parking system/Smart Parking "Peasy"	This is a B2B2C solution to connect drivers who want to secure parking lots smoothly and parking lot companies which want to establish parking lots easily and pull in customers. The low cost and ease of facility establishment solution solves the problem of lack of parking lots in the inner cities.
Learning	C	1	The cardboard robot for proگرامing education "embot"	This is a cardboard robot for proگرامing education; proگرامing will become a compulsory subject in 2020. Because it is made of cardboard, children can easily exercise creativity. In addition, through the applications developed from the viewpoint of programmers, children can learn practical programming skills.
Learning	C	2	The music teacher robot	We exhibit a robot which acts like a music teacher; evaluates performance of musical instruments and gives advices.
Exciting	D	1	The floating globe drone display	The floating globe drone display is a globe display floating in the air which is the first in the world that can display an image to all directions from any place of the space. This technology realizes dynamic productions that the done moves about in the air in a concert hall and shows advertisement, which opens up the new drone market.
Exciting	D	2	Deformation Lamps(HENGENTO) - produce illusory movements in static photos and paintings -	This is the technology that can give the still image movement based on a characteristic of the human sight recognition, and giving light and the pattern of the shadow. This technology begins to be utilized for next-generation advertisement or marketing widely.

Exciting	D	3	The immersive telepresence "Kirari!"	This technology transports the entire space of a sporting match and entertainment to remote venues, and reproduces it with vivid sense of reality. With the technology, we aim to realize space in which athletes, performers, audience in one location and audience in remote locations can share the excitement in real-time.
Exciting	D	4	The "YOYOGI CANDLE 2020"	We reproduce the projection mapping "YOYOGI CANDLE 2020" carried out during the event which was held 1,000 days before Tokyo Olympics 2020.
Exciting	D	5	The "dreamoc(drímɔk)" - 3D hologram display -	This is a 3D hologram display making a video float by reflecting the video to a pyramidal display. You can watch the three-dimensional video with naked eyes, not only from the front side but also from the sides.
Exciting	D	6	The naked eye 3D video screen which realizes natural exercise parallax	This is the naked eye 3D video display technology realizing, with the fewer number of projectors, the smooth exercise parallax corresponding to the viewpoint movement.
Exciting	D	7	HD VR(Virtual Reality)audio-visual system	You can experience the stereophonic sound and high-definition 8K video with the Head Mount Display of state-of-the-art quality. Enjoy two contents: "Ryukyu PANORAMA VR", combination of Japanese and western dance music, and "Quartet360", traditional performing arts with the backdrop of scenery of Okinawa.
5G	E	1	The Multichannel MMT transmission of 8K videos by employing 5G	By employing the 5G links, we transmit 4 powerful high-definition 8K video channels and display them to the four 8K displays simultaneously. In this system, we realize stable video delivery by MMT transmission supporting the error correcting control in the application layer.
5G	E	2	The demonstration of connected car using the 5G communication	We display the real-time video stream demonstration of connected car using the 5G communication that DOCOMO performs in cooperation with Intel, Ericsson, Denso, Toyota.
5G	E	3	The sensor collecting information with the high-specification ITS system using 5G	We carried out a 5G proof experiment of the ITS system which analyzes and delivers video and optical radar information collected from the vehicles and traffic infrastructure in the Sumitomo Electric Industries Yokohama examination course. We exhibit videos and data obtained from the experiment.
5G	E	4	The street museum 5G	Powerful 4K virtual reality unfolding before your eyes! It is the display of new sightseeing experience developed by Toppan Printing by employing the radio transmission technology of 5G.
5G	E	5	Providing 5G services to cars	We operate an automatic driving vehicle and perform remote monitoring employing 5G in Miraikan(National Museum of Emerging Science and Innovation). Visitors can experience the 5G services inside the car.
5G	E	6	The new interface display realized by 5G	We realize IoT devices, expected to be widely spread with the introduction of 5G system, by the display one step ahead into future.
5G	E	7	The virtual exhibition tour employing 5G	We shoot video inside the exhibition hall with a high definition camera and relay it on the 5G link. In the booth, you can virtually explore the exhibition hall with the VR headsets etc. We realize stable video transmission with a variable video encoding rate technique according to the radio communication quality.
5G	E	8	hitoe-muscle potential application ~5G remote coaching application by professional golf trainer~	This is a demonstration assuming a remote coaching service by a professional trainer based on integrated data. The service is realized by transmitting a video of user's golf swing and measurement information of muscle potential from a smartphone to the
5G	E	9	3D CAD model × VR space generation by 5G transmission - A new communication style realized by 5G -	This is an exhibition of transmitting a large-size 3D CAD model from a cloud by employing an ultra-high-speed low-latency 5G link. We provide a form of new communication from image sharing to agreement establishment in the VR space instantaneously realized from the 3D CAD.
5G	E	10	Realization of a security area with a face recognition gate employing 5G	We built a "virtual fence" which detects the entrance of suspicious people by always performing face recognition within a specific space with monitoring cameras connected to 5G. This realizes guard for smart and secure new era.
5G	E	11	The 5G end-to-end solution demonstration - The near future communication with fusion of real and virtual -	NTT DOCOMO and Huawei jointly examine an ultra-high-speed 5G radio transmission technology using the high frequency band (28GHz). In the live demo, by using the AR glasses, you can experience communication of the near future when real and virtual spaces are fused.
5G	E	12	Free View Point Live II	We introduce new virtual space entertainment using the real-time free viewpoint imaging technology.
5G	E	13	The "Geo-stadium"	You can experience a demonstration of a totally new form of sports watching using 5G and AR. You can watch games from various viewpoints through the displays such as smartphones.
5G	E	14	The new concept cart	We provide a new moving experience of the 5G era.
5G	E	15	The IoA virtual teleportation using 5G	This is the prototypic exhibition of "the IoA virtual teleportation" with 5G which Toppan Printing developed based on the results from the collaborative research conducted with the Rekimoto Lab, The University of Tokyo. We assume use cases such as remote sightseeing experience, sports watching, concert, remote working, etc.
5G	E	16	Telemetry for construction machine vehicle employing 5G	We show the video of demonstrative experiments of remotely controlling a construction machine vehicle (shovel car) of Komatsu by connecting it to a indoor cockpit via 5G. By seating inside the exhibition cockpit, visitors can experience the remote controlling of a construction machine via 5G from the operator's viewpoint.
5G	E	17	The "5G FACTORY III"	You can experience a low-latency remote operation system employing a 5G network.

AI Platform	F	1	The AI agent platform ~Toward the Open Partner Initiative~	We have opened up the "multipurpose dialogue service platform" aiming to "provide interactive AI to any objects". It consists of three engines: Speak; Manages conversation, Sense; Notifies suitable information by anticipating future activities, <u>Symphony: Controls the IoT devices.</u>
AI Platform	F	2	The multi language voice recognition platform	We introduce a voice recognition technology supporting ten Asia-Pacific languages employing the latest deep neural network.
AI Platform	F	3	The natural language processing technology for Chinese	It is anticipated that regiments of Chinese tourists will visit Japan from now until 2020. We introduce the development of normalizing technology (e.g. synonym, superordinate development, meaning conceptualization, peculiar expression extraction) for analyzing Chinese logs that will improve the accuracy of the translation <u>service from Chinese into Japanese.</u>
AI Platform	F	4	The Scenario generation support technology based on analysis of logs for interaction	We exhibit the technology that will analyze the logs of interactive system for users, will detect the failed point of talks, and will show a hint to improve a failed talks scenario. This technology automate analysis of the interactive logs, and reduce the <u>workload required for correcting of the talking scenario.</u>
AI Platform	F	5	The telephone auto answer system with FAQ Bot	We will implement the telephone FAQ auto answer system by combining the telephone auto answer system (i.e. the solution of a Telephone broadcasting station) and the NTT DOCOMO's natural interactive platform.
AI Platform	F	6	Repl-AI (r1pl-a:1) - The automation of inquiry by the chat bot -	We show the Open platform which is a part of DOCOMO's natural interaction technology cultivated by e.g. Shabette-Concier (Access the functions you wish to use and information you wish to know by simply talking to an animated character). You can create the program - "chat bot" - which can talk naturally by using letters, by using a Graphical tool. This is used by the auto answer to an inquiry or the campaign using the animated character.
AI Platform	F	7	The automatic rearranging technology of the photographs	We implement the high-precision automatic rearrangement of photographs by combining them based on image recognition as well as the analysis of position and schedule information. We also introduce the use cases of a commercial application [JS backup Photo] .
AI Platform	F	8	The suggestion of know-how about savings in purchase - You may transcend the limitation of the review based on the number of ★s? -	We suggest the technology that combines the review results in terms of the number of ★s used for favorite acquisition and the results of user-choice simultaneously.
AI Platform	F	9	The facial and attribute authentication system	This system detects the same face from a database by analyzing face images by using deep learning, and presumes attributes from the viewpoints of age, gender, and expression. <u>Miniaturization of the system allows implementation in smartphones and embedded</u>
AI Platform	F	10	The technology of preventing cheating by applying facial authentication - Detecting stand-ins and supporting online inviolation -	This technology is for preventing cheating such as stand-ins by constantly monitoring users from the cameras such as PCs in which the technology of facial authentication is implemented.
AI Platform	F	11	The automatic abstract generation system of newspaper articles	We developed an automatic abstract generation system of newspaper articles in order to effectively collect important information in the era of information overflows. The combination of traditional statistical method and neural network provide high <u>quality abstracts.</u>
AI Platform	F	12	The provisioning of comfortable networks by employing AI - The pursuit of QoE, shifting from reactive maintenance to proactive maintenance -	We present our activities on the detection of signs of failure by using huge network data and AI technology, the realization of proactive maintenance which does not degrade consumers' Quality of Experience (QoE), and the provisioning of comfortable network.
AI Platform	F	13	ECG wave form analysis technology - Aiming at accurate calculation of heartbeat during exercise-	We introduce the technology of extracting R waves using the original wavelet analysis from the heart electric wave with noise caused by work and exercise with movement such as twist of the trunk, extension, bending, etc. in order to calculate heartbeat <u>interval (RRI) with high accuracy.</u>
AI Platform	F	14	The results of a survey of maternity logs - Life log & genome analysis for disease prevention of pregnant women -	We introduce the results of a survey of big-data-analysis which combine three elements; genome-information of a pregnant woman, biological material included in blood, and daily life log data. The aim of the survey is to prevent diseases and detect them early for pregnant women.
AI Platform	F	15	The evolution and the application of mobile spatial statistics	We introduce the new mobile spatial statistics (i.e. Population flow statistics, real-time population statistics) currently being researched and developed, and the AI-Taxi and prediction of population in the near future which are the application of real-time <u>population statistics.</u>
AI Platform	F	16	The translation-assisting-microphones	We introduce a Bluetooth microphone which can assist the speech translation Application such as Hanashite Hon'yaku (Use your mobile phone to translate your message into the language of the other party). This service allows you to have a smooth conversation, by simply speaking as usual, with somebody who speaks a different language as if an interpreter was actually there <u>(with you).</u>
AI Platform	F	17	The translation-assisting-AI	This is the speech translator based on AI (Language processing technology) supporting different languages to assist communication for people visiting Japan. The <u>tool realizes more speedy and accurate communication.</u>
AI Platform	F	18	The peripheral facility and event information retrieval technology - You can easily look for popular facilities and events -	When facilities to visit in the destination are searched by using the AI agent or car navigation, a list of events is automatically presented based on retrievals from Twitter, as well as tweeted information of related Twitter to assist selection of users' preferable <u>facilities.</u>
AI Platform	F	19	The geo-fencing platform	We are developing a platform for smartphone applications which detects the going in/out of the virtual boundary line (geo-fence) in a map and utilizes check-in data. You can use the push delivery positioning linking and visualization function of position data.

AI Platform	F	20	The Image Recognition	We show the Image Recognition engine available for subject recognition, position recognition in the photo, and similar image retrieval. The combination of several image recognition engines and plural image data enables Image Recognition System specialized in various solutions.
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AI Platform	F	21	The cooperation trial system between cars and streets - The field trial of auto driving buses -	This is the trial system for ensuring safety by detecting pedestrians nearby with a laser sensor deployed on the roadside and by transmitting an alert and a camera image to an LTE tablet equipped with warning sounds to a auto drive bus when it enters a crossing with poor visibility.
IoT Platform	G	1	The technology for supporting cellular IoT	The cellular IoT is a LPWA deployed on cellular networks, and is realized by Cat.1, LTE-M, and NB-IoT. We will introduce the main cellular IoT technology that reduces power consumption of devices and supports stabilization of communication.
IoT Platform	G	2	The prototype/pre-commercial devices of LPWA demonstration for IoT - Lora/LTE-M devices and cellular drone devices -	This is the prototype/pre-commercial device for LPWA demonstration being developed for IoT. We will introduce the demonstration kit for LPWA (LoRa/LTE-M) featured by low power consumption and broadband communication, the ultra small and light telemetry board for cellular drone, and the communication box for operation management and low latency remote control.
IoT Platform	G	3	- The drone network platform aimed to increase the use of drones	NTT DOCOMO is performing demonstrative experiments in order to confirm the quality of communications of drones in the sky and the influence to the ground networks. We will introduce NTT DOCOMO's activities in its network for increasing the use of drones.
IoT Platform	G	4	The cellular drones - The reliability and safety operation of drones -	By using cellular techniques, we are working to realize a platform enabling reliable and safe operation of drones. We are trying to improve the operational efficiency in various fields and to provide solutions to social problems.
IoT Platform	G	5	The NTT DOCOMO's cloud package - We support your introduction and operation of public clouds -	NTT DOCOMO provides the know-how accumulated by using a public cloud. With the know-how, you can satisfy the security criteria equivalent to that satisfied by NTT DOCOMO.
IoT Platform	G	6	The "CostVisualizer" - We visualize the complicated AWS cost clearly -	We visualize the complicated AWS cost clearly. This tool will enable you to reduce the usage cost of a cloud.
IoT Platform	G	7	The "Fresh First" - The mail order site with platform for direct delivery from the farm -	This is a mail order site with a platform for farmers of vegetables and fruits. We deliver ultra fresh vegetables to the premises of the ones who placed the order on the next day at the earliest by harvesting and shipping them on the same day the order was placed. We provide an order administration system specialized in farm products, for which supplies are not stable due to weather.
IoT Platform	G	8	The "Location Net" - We watch schoolchildren and the elderly people. We also provide an object-management support tool for systems internal to a company -	We provide a positioning management solution with the Bluetooth technology. The use cases are the watching system for persons (schoolchildren / elderly people) and the work support tool which is object-management for internal systems.
Device & Interaction	H	1	The positioning technology of smartphones with magnetic marker for rotation angle	This is the technology for three dimensional positioning with magnetic marker by artificially generating the characteristic magnetic field that is not in the natural world. We have achieved the high-precision positioning relatively to the traditional technologies.
Device & Interaction	H	2	Please take me along by BuruNavi - The application of the force display device -	BuruNavi:the device for experiencing a kinesthetic illusory sensation of being continuously pulled, creates the force display in various forms. The six flexibility type device enables creation of kinesthetic illusory sensation of being pulled in various directions with VR, and two flexibility type device enable creation of kinesthetic illusory sensation of being pulled in any direction by combining the basic movement of it is shown scientifically and empirically that meditation is effective in stress reduction.
Device & Interaction	H	3	The meditation - The Meditation experience -	We demonstrate our activities for realization of an meditation experience application that lets you meditate easily during the lunch breaks in the office or at spare time at home.
Device & Interaction	H	4	The Head Mount Display in consideration of visual field characteristics ver.2	We created an affordable and wide-field Head Mount Display with two kinds of lenses in consideration of the characteristic differences between human peripheral vision and central field of vision. We evolved wide-field with new curved lens.
Device & Interaction	H	5	The Web screen customization technology	By easily customizing the web screens based on business operations without modifying the system, operations can be simplified and input errors can be prevented.
Network	I	1	The evolution of network - The evolution of network toward 5G era -	We introduce the radio technology toward the 5G launch in 2020 : the point of view of the propagation, and radio technology to launch the 5G. Additionally, we will display the antenna and radio equipment that services PREMIUM 4G : launched in September and DL peak rate is 788 Mbps.
Network	I	2	The field transport trial that will evolve 5G continuously beyond 2020	DOCOMO and Huawei carried out a field transmission experiment jointly. We introduce the results of the experiment of the high trust low latency communication using the frequency band of 4.5GHz, and the DL long distance and high speed transmission using the frequency band of 39GHz.
Network	I	3	The DOCOMO-HUAWEI 5G large-scale joint demonstration - The experiment of Massive MIMO on 4.9GHz -	We jointly experimented 5G transport on 4.9GHz with Huawei. We have demonstrate a 5G Massive MIMO technology (throughput improvement by highly advanced MU-MIMO and securing coverage by beam sweeping).
Network	I	4	The 5G real-time radio wave visualizer - It's the first in the world! This enables you to see the radio wave -	We developed a 5G real-time radio wave visualizer that enables you to see the radio waves that are measured and analyzed in real time.
Network	I	5	The 5G radio transmission of 8K video streams	DOCOMO demonstrate jointly with NHK the transmission of 8K high-definition video streams by employing the 5G features: high speed and large capacity communication.
Network	I	6	The ultra broadband mmWave radio transmission experiment	We introduce the experiment that DOCOMO and NOKIA conducted in Roppongi. The 70GHz band is used for the ultra broadband (1GHz bandwidth) transmission, and we introduce its basic specifications.
Network	I	7	The digital beam-forming transmission experiment using ultra multi-element Massive MIMO	We introduce the experiment that DOCOMO and NEC conducted jointly. We introduce the results of verification for digital beam-forming , which forms and controls the beams by digital signal processing, using spectrum ≤6GHz Massive MIMO.

Network	I	8	The experiment of in-building transmission using ultra density distribution antenna system	We introduce the experiment that DOCOMO and Fujitsu conducted jointly. We will relay the in-building transmission experiment being conducted on a ultra high density distribution antenna system in real time, showing the improved system capacity by the cooperative transmission of a large number of transmission points that are distributed with very high density.
Network	I	9	The experiment of 5G radio data transmission on 28GHz - The speeding up in a transmission and reception beamforming technology -	We introduce the experiment on the 28GHz band beamforming technology that DOCOMO and Samsung conducted jointly. We exhibit the 5G transmission examination equipment (base station and device) supporting the 28GHz beamforming and introduce the activity of the radio data communications experiment.
Network	I	10	The field transmission examination using the device embedded with the chipset for NOMA	We introduce the results of the examination of advanced Inter-User Interference Coordination technology that DOCOMO and MediaTek conducted jointly, with plural user terminals embedded with the world's first chip set publication for NOMA.
Network	I	11	The high SHF band ultra high speed Massive MIMO - The ultra high speed and high efficiency transmission with ultra multi-element antenna technology -	We introduce the wide band and ultra multi-element antenna technology on the 28MHz band that DOCOMO and Mitsubishi Electric researched and developed jointly. We also exhibit the 28GHz band 5G transmission equipment for 256 elements ultra multi-element antenna, and introduce the experiment of in/out-building radio propagation.
Network	I	12	The radio propagation on 60GHz band - The evaluation and modeling of	We are researching the radio propagation of the 60GHz band jointly with Keysight Technologies: high spectrum and broadband.
Network	I	13	The introduction of a 5G system evaluation tool	We developed a 5G system evaluation tool that evaluates the 5G performance in the actual environment, considering the specifics of the 5G technologies.
Network	I	14	The radio propagation of mmWave - The investigation of radio propagation specification of the bands of 40-60GHz for 5G -	We introduce the results of the examination of radio propagation that DOCOMO and Rohde&Schwartz conducted jointly. In addition, we introduce the examination equipment used for the examination.
Network	I	15	The wireless LAN control technology collaborating with 5G mobile - Improved communication quality by the wireless LAN control using	We introduce a communication quality improvement technology, which involves improved quality estimation accuracy of wireless LAN by collecting information from terminals by using the mobile links, and a dynamic control of terminals and wireless LAN base stations based on the estimation results.
Network	I	16	The cellular phone use in a hospital - For safe and secure use of cell-phones and smartphones -	We are investigate the influence that cell-phone radio waves have on medical equipment jointly with medical institutions and medical equipment vendors. The results are reflected in the "guidance" of the EMCC (Electromagnetic Compatibility Conference Japan)
Network	I	17	The Radio Protection for 5G - What is the difference with LTE/Premium 4G -	NTT DOCOMO's Research Laboratories have been continuously researching the assay methods of radio waves used for cell-phones. We are the only cell-phone company participating in domestic and foreign standardizations contributing to the development of the standards.
Network	I	18	The utilization of multi-band radio propagation evaluation technology - Recognizing the congestion in radio and transmitting information with reliability -	The multi-band radio propagation evaluation technology enables grasping/recognition of congestion in the radio transmission for various spectra simultaneously. By using the automatic radio communication control system reflecting the results provide reliability in radio communications, which usage is spreading as a social infrastructure.
Network	I	19	The evolution of the mobile network toward 5G - Providing the most suitable network for consumers	We introduce the vision of End-to-End slicing and a future service-case that will be realized by the collaboration of 5G core network technology, slice management technology, and virtual access networks technology needed for mobile networks in the future.
Network	I	20	Delivering "NETWORK" exclusive to you - Providing a corporate network comprehensively -	When a customer desires to provide a service, we will provide a network most suitable for the service in the way that it can be used immediately. The technology designs a network dedicated for the service, launches and operates all automatically, which reduces the burden of the customer.
Network	I	21	You can create an area only by bending a cable! - The ultra simple mmWave communication area construction method -	We suggest a method to build a communication area in the mmWave, which is attracting the use for 5G, with a simple movement of bending a cable .
Network	I	22	The "Ultra low latency/Broadband" network technology - It enables you to realize communication similar to the sense of a Human -	We will provide the resources of calculation deployed near the device/object of network for the middle B company of the B2B2X model. We will suggest the network architecture technology that utilizes edge computing, and realizes the new use case that enables you communication similar to the sense of a Human.
Network	I	23	The green smart energy technology for base stations - Aimed at disaster-resistance and environmental contribution -	We will introduce our activities on green base stations, and its functional improvements; "weather forecast interlocking movement control" which balances the environmental contribution and anti-disaster measures. This technology realizes lithium ion battery control based on weather forecasts, and contributes to conservation of global environment by reducing the use of commercial electricity and securing communication at the time of disasters.
Innovation Challenge	J	-	(This will be shown for the first time at the venue)	This is an exhibition of innovation challenge examples during the phase of ideation, not restricted to any particular field or domain. You can see the contents overflowed with free ideas and enthusiasm.
Solution	K	1	The healthcare with expiration measuring equipment - Shall we measure your fat metabolism level? -	We introduce a solution which visualizes fat metabolism levels only by letting out a breath on a device. This let you prevent obesity and improve and promote healthy management in a company, and healthcare of local residents.
Solution	K	2	NTT DOCOMO's fiber business Wi-Fi	This is a cloud Wi-Fi service with professional support including Wi-Fi introduction, operation, and management.

Solution	K	3	NTT DOCOMO's Wi-Fi which you only put on	You can easily introduce carrier-free Wi-Fi environment just by putting the device.
Solution	K	4	NTT DOCOMO's VR service	This is a package service that you can easily plan/operate the VR programs and widely provide the VR experience to the general consumers.