

Atal New India Challenge

Atal New India Challenge (ANIC) is an initiative by Atal Innovation Mission (AIM) aimed towards supporting innovators creating products based on advanced technologies in areas of national importance and social relevance through a grant-based mechanism, while addressing the second Commercialization Valley of Death, in which innovators are unable to access resources for piloting, testing, and market creation. The vision of the ANIC is two-fold: (a) help create products from existing technologies relevant for national and social causes (productization); (b) help new deep-tech products find markets and early customers (commercialization) in the context of India. The scope of the program extends to developing an institutional mechanism and structure to channel potential innovative ideas for products and technologies from Startups and MSMEs on their own or along with organizations, academic institutions and even individual innovators.

AIM launched the ANIC in April, 2018 with five partner Ministries / Departments of the Government of India for 24 different challenges.

Selection of Grantees for ANIC

The preliminary screening for sanity of applications as per ANIC Guidelines was done for verification of their eligibility with regard to submission of mandatory documents and type of entity. Subsequently, 519 applications were shortlisted for secondary evaluation by third party reviewers (AIM supported incubators and other partner incubators). An internal analysis was then conducted and the top 143 applications were shortlisted for the Screening-cum-Selection Committee (SSC) meeting which was held on 11th-12th March, 2019 at NITI Aayog. A total of 102 applicants (out of 143) presented before the SSC, and based on the recommendations of the Committee, **26 applicants have been selected for immediate ANIC Grant-in-Aid support, and 26 have been selected for handholding support and subsequently supporting them for ANIC Grant-in-Aid subject to subsequent review by SSC.**

The detail about shortlisted applicants for support under ANIC Grant-in-Aid is given below:

Ministry	Challenge Area	Applicant Details with Innovation Brief
Road Transport and Highways	Alternate fuel- based transportation	<ul style="list-style-type: none">• Mayur Patil, Small Spark Concepts Technologies Pvt. Ltd. (patent pending air filter technology to improve fuel efficiency and curb harmful vehicular emissions)• John Abraham, Kerala Veterinary and Animal Sciences University (Bio-diesel production from chicken slaughter waste is a project that produces three products from a health hazardous waste: Bio-diesel- a renewable fuel, bio-fertilizer for organic farming and glycerol for soap making.)
	Smart Mobility	No suitable applicant found

	Electric Mobility	<ul style="list-style-type: none"> • Rakesh MK, Meladath Auto Components Private Limited (electric conversion kit which can convert the existing petrol scooters to a hybrid within 30 minutes without any modification to the existing scooters) • Rajeev Ranadive, Pixy Electric Cars Pvt Ltd (Bolt-On Electric Conversion kit for converting existing cars to full electric) • Nikhil Gonzalves, Ingo Electric (Portable Mobility in controlled environments – a new battery Chemistry invented)
	Safe transport	<ul style="list-style-type: none"> • Raghavendra Mysore, Sirab Technologies Transportation Private Limited (patented automated vehicle guidance system- aims to better integrate proven technologies to achieve desired objective of higher lane utilization, fuel efficiencies, business-model and methodology to scale) • Mitesh Rasal (wheels which have suspension integrated replacing the spokes) • Smitiparna Satpathy, Tycheejuno Speciality Tyres Private Limited (Anti Burst, Anti Puncture Tyre with patented BPPC Technology) • Amit Pathak, Shellios Technolabs Pvt Ltd (PUROS anti-pollution helmet, which is a Patented device with an air purification system integrated in the form factor. It is BIS Certified and readying to launch in Early 2019.) • Shampa Choudhary, PriStech Technologies Private Limited (connect all mobility dots in the Cities & mobilize efficiency and sustainability by atleast 30%, hence, bringing mobility experience faster and economical for citizens) • Rahul Sharma (a complete system that tracks, authorizes aerial vehicles while keeping them away from No-Fly zones)

Agriculture and Farmers' Welfare	Climate-smart agriculture	<ul style="list-style-type: none"> • Sakthivelu K (Soil Moisture Sensor) • Renuka Karandikar, Bioprime Agrisolutions Pvt Ltd (bio-chemicals that modulate physiological responses manifested by the plants.) • Lokesh Makam, Barrix Agro Sciences Pvt Ltd (Fly trap stereoisomer in Kerala) • Mahesh SS, Grus Ecosciences (Vibration Sensor to detect larval haemolymph) • Katherine Anne Taylor, Khethworks Pvt Ltd (Submersible solar pumps) • Avinash KR, Vyoda Private Limited (Solar pump) • Pracheer Dutta, Kriya Labs Pvt Ltd (Small scale pulp making units) • Girish Aivalli, Intello Labs Private Limited (Image based quality testing of agri-produce) • Vasant Bhat, TRITHI Robotics Pvt Ltd (Drone services for precision farming)
Railways	Fog vision system for road and rail	No suitable applicant found
	Systems to predict identify and recognize rail failure using technologies	No suitable applicant found
	Predictive Maintenance of Rolling Stock	No suitable applicant found
Drinking Water and Sanitation	Instant Portable Water Quality Testing	<ul style="list-style-type: none"> • Pradeep Balkunde, Foundation For Environmental Monitoring (Smartphone based Colorimetric analysis of heavy metals in water)
	Sustaining drinking water sources	No suitable applicant found
	Digital Water Management	No suitable applicant found
	Providing potable water to water quality affected areas	<ul style="list-style-type: none"> • Indra Sen, Nature Annalytics (framework for assessing contamination levels in a centralized manner and providing, from the user perspective, clean water at significantly reduced cost and complexity compared to currently available solutions)
	Data analytics for water governance	No suitable applicant found

	Mini Desalination plants in coastal areas	No suitable applicant found
	Grey water management	No suitable applicant found
	Affordable Desalination/Recycling Technology	No suitable applicant found
	Waste management recycling and reuse	<ul style="list-style-type: none"> • Suraj Nandkumar, Recity Network Private Limited (It is a city resource management organization with current focus on ‘Waste as a resource’. This is done by creating platforms where government, citizens, waste workers and experts interact and problem- solve together) • Dr. Narendra Reddy, Agringenium Innovations Private Limited (Technology to utilize agricultural residues such as straws, bagasse, coir etc in their original form to develop bioproducts for high value applications such as biodegradable packaging boxes, false ceiling tiles, sapling trays, cups and containers.) • Cibhi Sel Ven, Regeno Ventures Pvt. Ltd., (A biodegradable and compostable replacement for single use plastics made from vegetable starch and other natural extracts.)
	Cleaning of Sewers and Septic Tanks	No suitable applicant found
Housing and Urban Affairs	Garbage composition devices	No suitable applicant found
	Quality of compost	No suitable applicant found
	Decentralized composting	No suitable applicant found
	Mixing blades for composting	No suitable applicant found
	Waste in public spaces	<ul style="list-style-type: none"> • Siddhant Tawarawala (patented uni-sexual pocket toilet which ensures high standards of hygiene and can be used both for indoor or outdoor purposes)
	Dissuading public littering	No suitable applicant found

Additionally, the following applicants were also shortlisted for Handholding Support through Atal Incubation Centres or any suitable incubation centre / facilitation agencies wherein the

applicants need proper handholding for deployment of the innovation and their consideration for ANIC Grant-in-Aid Support will be further evaluated separately :

Ministry	Challenge Area	Applicant Details with Innovation Brief
Road Transport and Highways	Alternate fuel- based transportation	No suitable applicant found
	Smart Mobility	No suitable applicant found
	Electric Mobility	<ul style="list-style-type: none"> • Amit Raje, Faradigm Ultracapacitors Pvt Ltd. (Ultracapacitors for Battery Less / Battery Assist EVs in city feeder routes, designed to maximize the recuperation and reuse of regenerative braking energy) • Sanjeev Kumar, Criollo Automobiles LLP (Ultracapacitors for Battery Less / Battery Assisted EVs in city feeder routes) • Mahesh Mahajan, Angadi Institute of Technology And Management (A new design of electric vehicle)
	Safe transport	<ul style="list-style-type: none"> • Prakash Govindaya Merala (Innovative System that can douse Car Fire with just a press of a Switch) • Varun Seth, Matisoft Cyber Security Labs (Technology replicates the brain of a human cyber security expert & combines it with the compute capacity of the device to make a truly smart engine that intelligently protects the device against virus attacks)
Agriculture and Farmers' Welfare	Climate-smart agriculture	<ul style="list-style-type: none"> • Damodhar Paleti, Suyoga Software Solutions Pvt Ltd (Suyoga Kisaan, Developed an easy-to-use Kisaan2Kitchen (K2K) Agri E-commerce Solution for the perishable produce market) • Vinay Palaparthi, Proximal Soilsens Technologies Private Limited (Developed an early stage plant diseases prediction system and provides control measures) • Ekta Jaju, Onganic Foods Private Limited [An Organic Social Enterprise (www.ONganic.in) based in East India and works directly with organic small holder certified grower groups through a seed to shelf model] • Rahul Ganapathy, Atsuya Technologies Pvt Ltd. [The technology leverages the power of IoT (the internet of things) to offer a state-of-the-art yet intuitive and cost-effective solution to the problem of refrigerated product wastage.] • Rohit Shah, Kalki Ecosphere LLP (An improved filter cum storage container for liquid which functions in a single container by sharing and adjusting the space for process and storage.

Railways	Fog vision system for road and rail	<ul style="list-style-type: none"> • Shashikala Tapaswi, Renaissance technology Pvt. Ltd. (The proposed solution will be in the form of a device named Dradh Drishti Prabhardhan (DDP). A prototype of DDP has been developed in Cloud-Computing (CC) Lab at ABV-IIITM, Gwalior.) • Surya Satyavolu, Sirab Technologies Transportation Private Limited (a computerized system for controlling automotive functions of a vehicle, includes a multi-core system on chip; a hypervisor including a multi-core synchronization function for a plurality of cores on the system on chip; and a plurality of automotive function modules in communication with the plurality of cores through the hypervisor)
	Systems to predict identify and recognize rail failure using technologies	<ul style="list-style-type: none"> • Dhirendra Singh, Renaissance technology Pvt. Ltd. (Advanced Loco-pilot Assistance System (ALAS), Loco Pilot drowsiness/Stress detection and alert system, Signal Jump alert/warning with Emergency Braking System (EBS), Front Long Range Radar to see in fog and rainy condition)
	Predictive Maintenance of Rolling Stock	<ul style="list-style-type: none"> • Arshad Pulikkal, Bytematics Technologies Private Limited (A product suit which takes care of preventive maintenance, post breakdown management and predictive maintenance)
Drinking Water and Sanitation	Instant Portable Water Quality Testing	No suitable applicant found
	Sustaining drinking water sources	<ul style="list-style-type: none"> • Dr. G. Panduranga Murthy, Maharaja Research Foundation (A technology for improving the water discharging capacities in tandem with hydraulic behavior followed by reviving and restoration of Talapariges, a shallow water natural spring, with techno-economic feasibility) • Gayatri Deshpande, (Adaptation of Permeable Articulated Concrete Blocks (PACB) in Indian conditions to develop a method for efficient water harvesting.)
	Digital Water Management	No suitable applicant found
	Providing potable water to water quality affected areas	<ul style="list-style-type: none"> • Ajinkya Dhariya, Pad Care Labs Private Limited (Rapid, cost effective, eco-sterilization and waste recycle solution for sanitary waste)
	Data analytics for water governance	No suitable applicant found
	Mini Desalination plants in coastal areas	No suitable applicant found

	Grey water management	<ul style="list-style-type: none"> Gadhadar Reddy, NoPo Nanotechnologies India Private Limited (Developed a Carbon Nanotube based Water Purifier that makes use of the unique water transport phenomenon observed in the small diameter (0.6-1nm) single walled carbon nanotubes (SWCNT). This process is 1000x times more efficient than the biological pores.)
	Affordable Desalination/Recycling Technology	No suitable applicant found
	Waste management recycling and reuse	<ul style="list-style-type: none"> Dr. S. Krupakar Murali, (Conversion of waste into liquid fertiliser and bio-pesticide) Dr. Charu Khosla, Chitkara University (Developed a Biomass cooking stove which is an Improved Forced Draft Biopellet Stove with a high Thermal Efficiency and very low TPM content and CO emissions and can operate on more than one alternate fuel) Anurag Asati, Asar Green Kabadi Pvt Ltd (thekabadiwala.com) [Working on SaaS (Software as a Service) based model for technology platform to make Smart Waste Management system] Dr Padma Shree Vankar (RAMPAD development of an adsorbent which can change the color and odor of used frying oil)
	Cleaning of Sewers and Septic Tanks	No suitable applicant found
Housing and Urban Affairs	Garbage composition devices	<ul style="list-style-type: none"> Sreevidya Ramanathapuram Kandavelu (Domestic Garbage treatment device)
	Quality of compost	<ul style="list-style-type: none"> Ponram P, Tejas Translational Technologies Private Limited (Measuring the quality of compost by means of measuring the quantity of decomposition, through gases that emanate as a result of decomposition)

	Decentralized composting	<ul style="list-style-type: none"> • Ajay Palta, Palta Engineering Works Pvt. Ltd. (XAPER, a three-in-one patented technology, is capable of handling mixed waste, segregated wet waste as well as segregated non-biodegradable waste by a single machine. It has been designed to be used in a decentralized mode, particularly for areas where segregation is a challenge or there are space constraints) • Poonam Bir, PBK Waste Solutions Pvt. Ltd. (Prototyped and designed a new community composter - the Aaga, also currently working on building a sensor-based app to measure the weight of organic compost in the Aaga community composter so that customers can see the amount of waste they are keeping away from landfills, compare their data with neighbours and be inspired to improve their performance)
	Mixing blades for composting	No suitable applicant found
	Waste in public spaces	No suitable applicant found
	Dissuading public littering	No suitable applicant found

It may also be noted that the applicants who were physically present for the final presentation before the SSC, can also be connected to relevant incubators for their support and growth, by AIM.

Please note that the 26 applicants shortlisted for the ANIC Grant-in-Aid and the 26 applicants shortlisted for handholding support will be called for a separate meeting to discuss the further plan of action. They would be required to adhere to the ANIC Deployment Guidelines to avail the support offered by AIM, NITI Aayog.
