ਡਾਇਰੈਕਟਰ ਜਨਰਲ ਸਕੂਲ ਐਜੂਕੇਸ਼ਨ-ਕਮ-ਐਸ.ਪੀ.ਡੀ
ਰਾਸ਼ਟਰੀ ਮਾਧਮਿਕ ਸਿੱਖਿਆ ਅਭਿਆਨ ਅਥਾਰਟੀ, ਪੰਜਾਬ
ਪੰਜਵੀ ਮੰਜਿਲ, ਈ ਬਲਾਕ, ਸਿੱਖਿਆ ਭਵਨ, ਫੇਜ਼-8 ਐਸ.ਏ.ਐਸ ਨਗਰ, ਪੰਜਾਬ-160062
ਵੈਬਸਾਇਟ **www.ssapunjab.org** ਫੋਨ ਨੰ:0172-5212313,5212322

ਵੱਲ

ਸਮੂਹ ਪ੍ਰਿੰਸੀਪਲ
ਸਰਕਾਰੀ, ਸਰਕਾਰੀ ਏਡਿਡ, ਲੋਕਲ ਬੋਡੀ, ਪ੍ਰਾਇਵੇਟ ਟ੍ਰਸਟ/ਸੋਸਾਇਟੀ ਸਕੂਲ
ਪੰਜਾਬ।

ਮੀਮੋ ਨੰ. ASPD/Plan/RMSA/2016/8256 ਮਿਤੀ: 27 / 05 / 2016

ਵਿਸ਼ਾ: ਭਾਰਤ ਸਰਕਾਰ ਵਲੋਂ Atal Innovation Mission ਤਹਿਤ ਸਕੂਲਾਂ ਵਿੱਚ Atal Tinkering Labs ਖੋਲਣ ਸਬੰਧੀ

1.0 ਵਿਦਿਆਰਥੀਆਂ ਵਿਚ Scientific ਸੋਚ ਪੈਦਾ ਕਰਨ, ਖੋਜੀ ਪ੍ਰਵ੍ਰਿਤੀ ਉਤਸ਼ਾਹਿਤ ਕਰਨ ਲਈ ਅਤੇ ਉਨ੍ਹਾਂ ਦੇ ਵਿਚਾਰਾਂ ਅਤੇ ਸੋਚ ਨੂੰ ਨਵੀਂ ਦਿਸ਼ਾ ਦੇਣ ਲਈ ਭਾਰਤ ਸਰਕਾਰ ਵਲੋਂ ਨੀਤੀ ਆਯੋਗ ਵਿਖੇ Atal Innovation Mission ਸਥਾਪਿਤ ਕੀਤਾ ਗਿਆ ਹੈ। ਇਸ ਮਿਸ਼ਨ ਤਹਿਤ 6ਵੀਂ ਤੋਂ 12ਵੀਂ ਜਮਾਤਾਂ ਵਾਲੇ ਸਕੂਲਾਂ ਵਿੱਚ Atal Tinkering Labs ਖੋਲੀਆਂ ਜਾਣੀਆਂ ਹਨ। ਇਸ ਸਕੀਮ ਦਾ ਲਾਭ ਲੈਣ ਹਿੱਤ ਸ਼ਰਤਾਂ ਅਤੇ ਅਗਵਾਈ ਸਬੰਧੀ ਦਸਤਾਵੇਜ਼ ਨੀਤੀ ਆਯੋਗ ਦੀ ਵੈਬਸਾਇਟ www.niti.gov.in ਅਤੇ ਵਿਭਾਗ ਦੀ ਵੈਬਸਾਇਟ ssapunjab.org ਤੇ ਉਪਲੱਬਧ ਹਨ। ਸਕੂਲਾਂ ਵਲੋਂ Atal Tinkering Labs ਲਈ ਸਿੱਧੇ ਤੌਰ ਤੇ ਆਨ ਲਾਈਨ ਨੀਤੀ ਆਯੋਗ ਦੀ ਵੈਬਸਾਇਟ www.niti.gov.in ਤੇ ਅਪਲਾਈ ਕੀਤਾ ਜਾਣਾ ਹੈ। ਆਨ ਲਾਈਨ ਅਪਲਾਈ ਕਰਨ ਦੀ ਆਖਰੀ ਮਿਤੀ 17 ਜੂਨ 2016 ਹੈ।

2.0 ਸਮੂਹ ਸਕੂਲ ਮੁੱਖੀਆਂ ਨੂੰ ਲਿਖਿਆ ਜਾਂਦਾ ਹੈ ਕਿ ਇਸ ਸਕੀਮ ਦਾ ਲਾਭ ਲੈਣ ਲਈ Prescribed Performa ਤੇ ਹਦਾਇਤਾਂ ਅਨੁਸਾਰ ਨਿਸਚਿਤ ਮਿਤੀ ਤੱਕ ਅਪਲਾਈ ਕੀਤਾ ਜਾਵੇ ਅਤੇ ਅਪਲਾਈ ਕਰਨ ਉਪਰੰਤ ਉਸਦੀ ਸੂਚਨਾ ਈ.ਮੇਲ ਰਾਹੀਂ rmsaplanning@gmail.com ਤੇ ਭੇਜਣੀ ਯਕੀਨੀ ਬਣਾਈ ਜਾਵੇ।

ਡਿਪਟੀ ਸਟੇਟ ਪ੍ਰੋਜੈਕਟ ਡਾਇਰੈਕਟਰ
ਆਰ.ਐਮ.ਐਸ.ਏ, ਪੰਜਾਬ

ਪਿੰਠਅੰਕਣ: ASPD/Plan/RMSA/2016/8257 ਮਿਤੀ: 27 / 05 / 2016

ਉਪਰੋਕਤ ਦਾ ਉਤਾਰਾ ਹੇਠ ਲਿਖੀਆਂ ਨੂੰ ਸੂਚਨਾ ਅਤੇ ਲੋੜੀਂਦੀ ਕਾਰਵਾਈ ਹਿੱਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ।

1. ਸਮੂਹ ਸਰਕਲ ਅਫਸਰ
2. ਸਮੂਹ ਜਿਲ੍ਹਾ ਸਿੱਖਿਆ (ਸੈ.ਸਿ)
3. ਪੀ.ਏ ਟੂ ਪ੍ਰਮੁੱਖ ਸਕੱਤਰ ਸਕੂਲ ਸਿੱਖਿਆ
4. ਪੀ.ਏ ਟੂ ਡੀ.ਜੀ.ਐਸ.ਈ.
5. ਪੀ.ਏ. ਟੂ ਡੀ.ਪੀ.ਆਈ (ਸੈ.ਸਿ)
6. ਪੀ.ਏ. ਟੂ ਡੀ.ਪੀ.ਆਈ. (ਐ.ਸਿ)
7. ਪੀ.ਏ ਟੂ ਡਾਇਰੈਕਟਰ ਐਸ.ਸੀ.ਈ.ਆਰ.ਟੀ.

ਡਿਪਟੀ ਸਟੇਟ ਪ੍ਰੋਜੈਕਟ ਡਾਇਰੈਕਟਰ
ਆਰ.ਐਮ.ਐਸ.ਏ, ਪੰਜਾਬ

ANNEX II

SELECTION CRITERIA

1. Applications will be solicited from eligible schools to establish ATL.

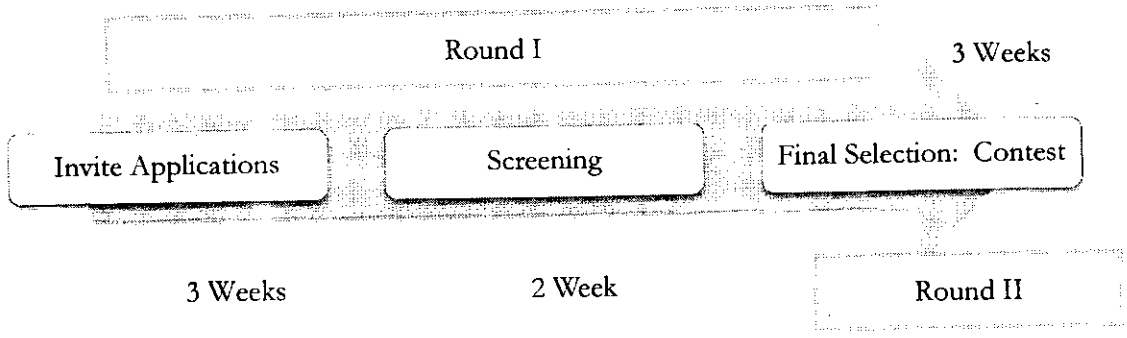
2. The eligibility criteria for schools are:

Criteria	Parameters
Infrastructure	• All weather area (1,500 sq. ft.) • Functional computer with internet facility • Electricity connection
Faculty	• Dedicated & qualified staff : Maths & Sciences
Reach	• Enrolment – Min. 400 students in Grade VI – XII • Regular attendance of 75% & above of the staff & enrolled students over the past 3 years

3. The parameters to be used for screening of schools are:

Criteria	Parameters
Performance of Students	• % of students scoring 70 – 80% in Grade X & XII board exams in previous 3 years • % of students scoring 80 – 90% in Grade X & XII board exams previous 3 years • % of students scoring 90% and above in Grade X & XII board exams in previous 3 years • Participation of school in science-related activities at district, state and national level
Reach	• Total enrolment of students in Grade VI – XII
Implementation Plan	• Activity plan • Linkages to mentors • Plan to tap private sector / CSR funding for sustaining operations & funding ATL • Difference ATL would bring to learning process for children

4. Selection Process Time lines:



ANNEX III

FORMAT OF APPLICATION FORM FOR SETTING UP OF ATAL TINKERING LABORATORIES (ATL)

1. Name of school	2. Type of school ☐ Government ☐ Private-aided ☐ Local Body ☐ Private-unaided
3. Maximum education grade offered ☐ Upper Primary ☐ Secondary ☐ Higher Secondary	4. Type of funding ☐ Government ☐ Private
5. Address of school	
6. State	7. District
8. Board of affiliation: (ICSE, CBSE, SSC etc.) ☐ CBSE ☐ ISCE ☐ State Board	
9. Whether dedicated area for ATL is greater than or equal to 1,500 sq. ft. ☐ Yes ☐ No	
10. Number of students from Grade VI - XII:	
11. Is the attendance of staff and enrolled students above 75% for the past three years ☐ Yes ☐ No	
12. Percentage of students (Grade X & XII) obtaining the following scores in board exams in the previous 3 years :	
2013 - 14 2014 - 15 2015 - 16 70-80% : ____ ____ ____ 80-90% : ____ ____ ____ 90-100% : ____ ____ ____	

13. Other parameters	Yes	No
Steady electricity connection	☐	☐
Minimum one functional computer with internet connection	☐	☐
Gathering capacity of more than 30 students at any point	☐	☐
Dedicated staff for: a) Mathematics b) Science	 ☐ ☐	 ☐ ☐

14. Other facilities available			
☐ Computer Lab	☐ Science Lab	☐ Library	☐ Playground

15. How will you encourage innovation after establishment of ATL in your school? (500 Words) (Your action plan should include details on activities planned, utilisation plan of the lab, linkages to mentors and plan to tap funding from other sources. Also, elaborate

on the qualifications and the involvement of the Principal and faculty-in-charge in innovation related activities)

16. Is your school involved in any kind of science and technology related activities? Elaborate. Do you have any notable alumni in the field?
[National Talent Search Examination (NTSE), Junior Science Talent Search Examination (JSTS), National Science Olympiad (NSO), Kishore Vaigyanik Protsahan Yojana (KVPY) etc.] (200 Words)

17. Any other relevant information? (200 Words)

ANNEX IV

ILLUSTRATIVE LIST OF EQUIPMENT AND KITS IN ATAL TINKERING LABORATORIES (ATL)

No	Category	Type	Name	Quantity	Description
1	Rapid Prototyping Tools	Equipment	3D Printer Kit and tools	1	1.75 mm PLA Printer, With 180mm ×200mm ×160mm Build Volume, Spatula, Tweezers, Cutter, Screwdriver, Wrench etc.
2	Rapid Prototyping Tools	Consumables	Consumables		Set of Arts & Crafts Accessories
3	Electronics Development	Equipment	Intel Galileo, Genuino & Edison	5	
4	Electronics Development	Equipment	Arduino Uno Boards	10	
5	Electronics Development	Equipment	Breadboards & Mini Breadboard	8	Solder less 400 points and 800 points (8 of each), Self-adhesive proto shield
6	Electronics Development	Equipment	General Purpose Board	30	30 boards of each size of A1,A2 and A3
7	Electronics Development	Equipment	USB Cables	10	USB Cable Set (A to B)
8	Electronics Development	Consumables	Multiple	15	9 Volt battery, multiple resistors and capacitors for electronic projects (various sizes)
9	Internet of Things & Sensors	Equipment	IR Sensors	50	
10	Internet of Things & Sensors	Equipment	Triple Axis Magnetometer Breakout - HMC5883L	5	
11	Internet of Things & Sensors	Equipment	Humidity Sensor	5	
12	Internet of Things & Sensors	Equipment	MQ-4 Natural Gas sensor	5	
13	Internet of	Equipment	TSOP 1738	5	

	Things & Sensors				
14	Internet of Things & Sensors	Equipment	Ultrasonic Sensor Module HC-SR-04	5	
15	Internet of Things & Sensors	Equipment	ADXL335	5	
16	Internet of Things & Sensors	Equipment	PIR Motion Detector Module	5	
17	Internet of Things & Sensors	Equipment	CMOS IR Camera Module - 728x488	3	
18	Internet of Things & Sensors	Equipment	RFID Reader - Tags	5	
19	Internet of Things & Sensors	Equipment	RF Modules Tx & Rx 315 MHz ASK	5	
20	Internet of Things & Sensors	Equipment	Zig-bee	10	
21	Internet of Things & Sensors	Equipment	GSM Module	2	
22	Internet of Things & Sensors	Equipment	Voice Recognition	2	
23	Internet of Things & Sensors	Equipment	Wire Strippers	10	Wire Stripper Cutter Plier With Spring -26x6x20 Cms (LxWxH)
24	Internet of Things & Sensors	Equipment	Hot glue gun + Glue Sticks	1	Range in open space(Standard Conditions) : 100 Meters
25	Internet of Things & Sensors	Equipment	Soldering Iron Kit Temperature Controlled Soldering Station	1	SIM900A based Quad band GSM/GPRS modem. Accepts 12V input supply
26	Internet of Things & Sensors	Equipment	Screwdriver	2	Multi-purpose
27	Internet of Things & Sensors	Equipment	Tool Set	2	Multi-purpose

28	Internet of Things & Sensors	Equipment	Digital Multi Meter	10	Digital Multi meter Voltage Current Resistance-Seven functions + nineteen ranges to cover = DC voltage 200mV to 1kV,AC voltage 200V-750V,DC current 200 microamp-10 Amp, Resistance 200-2meg Ohm and Transistor & diode test.AC and DC voltage, Resistance, DC amps
29	Internet of Things & Sensors	Equipment	DC Power Supply	1	0-30 V 1 A digital DC power supply with variable adjustment
30	Internet of Things & Sensors	Equipment	Digital Oscilloscope	2	Dual Trace Oscilloscope , 200 MHz, 2 Channel, 2GS/s Digital Storage
31	Internet of Things & Sensors	Equipment	Cables	50	Micro USB, Mini USB, USB A-USB B, USB - USB. Each 10 pieces
32	Internet of Things & Sensors	Equipment	Adapters	20	DC power Adapter with 5V, 12V. Each 10
33	Robotics	Equipment	Motors		
34	Robotics	Equipment	Arduino Robot Kits		
35	Robotics	Equipment	Lego EV3 Kit		
36	Mechanical Tools	Equipment	Hacksaw		Junior
37	Mechanical Tools	Equipment	Micro Chisel Set		
38	Mechanical Tools	Equipment	Pliers		External Straight Nose Circlip Plier, Long Nose Plier, Combination Mini Plier, wire stripping pliers, bent nose pliers, Needle nose pliers
39	Mechanical	Equipment	Mini Hack		

	Tools		Saw		
40	Mechanical Tools	Equipment	Ball Pen Hammer		
41	Mechanical Tools	Equipment	Steel Shaft Claw Hammer		
42	Mechanical Tools	Equipment	Fiber Glass Nail Hammer		
43	Mechanical Tools	Equipment	Rubber Mallet		
44	Mechanical Tools	Equipment	C-Clamp		
45	Mechanical Tools	Equipment	Allen Key Set		
46	Mechanical Tools	Equipment	Dremel Workstation for drilling		Bosch
47	Mechanical Tools	Equipment	12 piece combination Spanner Set		
48	Mechanical Tools	Equipment	12 Piece Open ended Spanner Set		
49	Mechanical Tools	Equipment	30 Piece Ratcheting Screwdriver Set		
50	Mechanical Tools	Equipment	Baby Vice 60 mm		
51	Mechanical Tools	Equipment	6 Piece Precision Screw Driver Set		
52	Mechanical Tools	Equipment	Adjustable Scanner		
53	Measurement Tools	Equipment	Stanley STHT30437 5Mx19mm Global Power Return Tape with Blister Pack		
54	Measurement Tools	Equipment	Stainless Steel 12" / 150 mm Rule		
55	Measurement Tools	Equipment	150 mm / 6" Digital Vernier Caliper		
56	Measurement	Equipment	12" Spirit		

	Tools		Leve		
57	Measurement Tools	Equipment	Digital Pen Tester		
58	Measurement Tools	Equipment	Fluke 106 & 101 Multimeter		
59	Accessories	Consumables	Cutting Mats		A3 Size
60	Electric Tools	Equipment	Electric Screw Driver Set		
61	Electric Tools	Equipment	1800 W Dual Temperature Heat Gun		
62	Electric Tools	Equipment	Glue Guns for Tacking, Attaching and Working		
63	Power Supply & accessories	Consumables	9 volt battery clips		
64	Power Supply & accessories	Equipment	Hook-up Wires		Red & Black set 100 Meters each
65	Power Supply & accessories	Consumables	Consumables	16	M-M Jumper Cables, M-F Jumper Cables,
66	Power Supply & accessories		Power Strip for power adaptors		

ANNEX V

MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN ATAL INNOVATION MISSION AND HOST INSTITUTE TO SETUP THE ATAL TINKERING LABORATORY

The Atal Innovation Mission (hereinafter called as 'AIM') and the ********, Location (hereinafter called as 'Host Institute'), which is a school managed by government/local body / private entity establishing the Atal Tinkering Laboratory (hereinafter called as 'ATL') with its registered office at *********hereby agree to enter in an MOU on ** day of month 20** subject to the term and conditions stated in the MOU.

Whereas,

i) Atal Innovation Mission is a programme of the NITI Aayog, Government of India.
ii) The Host Institute is a recognised body under *****

Objectives

i) The role of AIM is to promote a culture of innovation and entrepreneurship in India and has therefore, has decided to establish a network of tinkering laboratories and provide the grant-in-aid for the same.
ii) The objective of this scheme is to foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mind-set, computational thinking, adaptive learning, physical computing etc.

Terms and Condition

1. Funding

(i) The host institute shall be provided a total financial support in the form of Grant-in-aid of Rs. 20 lakhs till **** 20** and would be exclusively spent on the specified purpose for which it has been sanctioned within the stipulated time.

(ii) The grant-in-aid includes an one-time establishment charge of upto Rs. 10 lakh for instruments and equipment like 3D printer in the first year and Rs. 10 lakh for operation of ATL, maintenance of equipment, purchase of consumables, organising popular science lecture series and other scientific activities, competitions and payment of honorariums to the faculty and mentors involved would be provided for a maximum period of 5 years.

(iii) The host institute shall maintain separate accounts for the funds received from AIM and other sources.

(iv) The host institute until its utilisation shall keep the grant-in-aid money in an interest bearing account. The interest earned on the grant money should be reported to the AIM, NITI Aayog and the same will be treated as a credit to the organization and will be adjusted towards further instalments of the grant.

(v) The ATL will be required to submit Utilisation Certificates (UCs) of the grant at the end of each financial year as well as at the time of seeking further instalments of the grant, if any.

(vi) Any unspent balance out of the amount sanctioned would be refunded to the Govt. of India by means of an Account's Payee Demand Draft drawn in favour of Drawing and Disbursing Officer, NITI Aayog, payable at New Delhi.

(vii) The brand name 'Atal Tinkering Laboratories' will be withdrawn in case of non-performance and closure of these laboratories.

2. Infrastructure

(i) At least 1,500 sq. ft. of built up space would be provided to set up the ATL.

(ii) All the assets acquired or created from the grant will be the property of the Government of India and should not be disposed-off or encumbered or utilised for purpose other than those for which the grant has been sanctioned without the prior permission of the AIM, NITI Aayog.

(iii) The host institute shall put in place the requisite physical infrastructure such as laboratory and workshop facilities, computer lab with internet within a period of 6 months from the date of release of funds. Other desirable facilities including meeting room and video conferencing facility to chat with experts in real time can also be set up by the schools, if possible.

3. Obligations of the Host Institute

(i) Setting up the requisite infrastructure within a period of 6 months from the date of release of funds.

(ii) Provide access to students after the working hours of the host institution

(iii) Identify and appoint adequate number of faculty members for managing day-to-day operations of the laboratory.

(iv) Identify and appoint mentors/volunteers for hand-holding and guidance in either an online or face-to-face environment.

(v) Ensure safety of the students during the working hours of ATL.

(vi) Develop network with industries, academia, research, civil society for knowledge sharing and mentoring support.

(vii) Conduct activities like regional and national level competitions, exhibitions, lecture series etc.

4. Monitoring

(i) The host institute will constitute an advisory body to monitor the operations of ATL on a suitable periodic basis. It will meet at least thrice in a year and send its report to AIM Directorate.

(ii) The advisory body of the ATL is required to send two copies each of i) annual implementation report providing information on the activities conducted; and ii) Utilization Certificate of the GOI Grant, in the prescribed pro-forma, to Atal Innovation Mission, NITI Aayog at the end of each financial year as well as at the time of seeking further instalments of the grant, if any.

(iii) Concerned officers of AIM, NITI Aayog or its authorised representatives may visit ATL periodically for ascertaining the progress of work and resolving any difficulties that might be encountered in the course of implementation.

(iv) AIM, NITI Aayog reserves the right to terminate support to the project at any stage, if it is convinced that the grant is not being utilised properly or that appropriate progress is not being made.

5. General Conditions

(i) AIM, NITI Aayog will have no responsibility in case of any loss is caused to any life or property due to accident, fire or any other reasons.

(ii) The MOU will be valid for 6 years from the date of signing and will be terminated before the period if the host institute is able to financially support the ATL itself or after the specified time period depending on a case by case basis.

(iii) The MOU can be modified or revised from time to time with mutual consent of the parties.

(iv) The MOU has to be supported with the following documents:

- Proof of availability of at least 1,500 sq. ft. built up space
- List of key mentors

(iv) Each of the undersigned signatories represent and warrant that he/ she is authorised to execute this arrangement on behalf of the party for whom he/ she signs and that no further authority or execution by any other person for such party is necessary.

To be signed by Representative of Host Institute	To be signed by Representative of AIM
Name:	Name:
Designation:	Designation:
Date:	Date:
Signature:	Signature
Witness and their addresses:	Witness and their addresses:
1.	1.
2.	2.

ANNEX VI

BOND FORM

(Applicable for schools other than government schools)

(Bond is to be furnished on Rs. 20/- or higher stamp paper and signed in original)

Know all persons by these present that we the .....
.....
..... (Name of school) and located at ..... in the State of ..... (hereinafter called the "**Obligator**") are held and firmly bound to the President of India (herein after called the "**Government**"), in the sum of Rs. ..... (Rupees in words .....) well and truly to be paid to the President on demand and without demur, for which payment we bind ourselves and our successors and assigns by these presents. The term, obligator or sureties, unless repugnant to the context, shall mean and include the respective agents, assigns, heirs, successors etc., as the case may be.

2. **SIGNED** this ..... day of .....in the year .....

3. **WHEREAS** on the Obligator's request the Government has as per Atal Innovation Mission (AIM) Letter No. ..... dated..... and herein after referred to as the letter of sanction/ approval, agreed to make in favour of the Obligator for the purpose of setting up Atal Tinkering Labs at above the school a grant of Rs. ..... (Rupees.....), the obligators have agreed to execute this bond in advance, in favour of Atal Innovation Mission, NITI Aayog for the entire amount of Rs.....as requested in the proposal sent to the Government. The obligator is willing to accept the proposed amount or any other amount approved/ sanctioned by the Government. The obligator is willingly executing this bond of the proposed amount with the stipulation that obligator will be bond up to this amount or by the actual amount approved/sanctioned by the Government. The obligator is also willing to accept all terms and conditions mentioned in the "Letter of Sanction" to be issued by the Government.

4. Now in consideration of the aforesaid letter of sanction, the obligator herein binds itself and undertakes to comply with the conditions of the letter of sanction referred to herein and if the obligator shall duly fulfil and comply with all its conditions mentioned in the letter of Sanction mentioning the grant then this bond or obligator's obligation therein shall be void and of no effect, but otherwise it shall remain in full force, effect and virtue, and the Government shall be at liberty to enforce this bond against the obligator jointly and/or severally, as it may deem fit and on its option. These presents further witness that:

a. The decision of the CEO, NITI Aayog, Government of India or the Mission Director of the Atal Innovation Mission, NITI Aayog, Government of India, administratively concerned with the matter, on the question whether there has been breach or violation on the part of the Obligator or any of the terms and conditions mentioned in the letter of sanction, shall be final and binding on the Obligator.

b. The Obligator shall, in the event of breach or violation of the terms and conditions mentioned in the letter of sanction, refund to the Government on demand and without demur the entire amount of Rs. ..... (Rupees .....) or such part thereof as may be mentioned in the Notice Demand issued by the Government along with the interest thereon at the rate of 11.50% compounded annually (which would be adjusted as per the Government of India notification issued from time to time) from the date of receipt of the said amount by the Obligator up to the date of refund thereof to the Government.

c. The obligator and surety confirm that they have understood the scheme of grant of sanction and they have executed this bond voluntarily and out of their free will.

d. The Government of India has agreed to bear the stamp duty, if any, chargeable on these presents.

5. In witness thereof these presents have been executed on behalf of the Obligator and the Sureties the day and year here in above written and accepted for (Name and Designation) on the day and year appearing against his signature.

Signed for and on behalf of the Obligators
(With date and Stamp/Seal)

Signature of the Surety

Signature of the Grantee
(With Date and Stamp/Seal)

In the presence of:

1..... .....
(Name & Address of witness) (Signature)
Aadhar Card No/PAN No.....

2..... .....
(Name & Address of witness) (Signature)
Aadhar Card No/PAN No.....

Accepted for and on behalf of the President of India

ANNEX VII

UTILISATION CERTIFICATE

S. No	Letter No. and Date	Amount (in Rs.)
	Total	

Certified that out of Rs. _____ of Grants-in-aid sanctioned during the year(s) _____ in favour of _____ by Atal Innovation Mission, NITI Aayog vide letter No. ..... dated ..... and Rs. _____ on account of unspent balance of the previous year, a sum of Rs. _____ has been utilised for the purpose of _____ for which it was sanctioned and that the balance of Rs. _____ remaining unutilised at the end of the year has been surrendered to Government (vide letter No. _____ dated _____) / or will be adjusted towards the grants-in-aid payable during the next year _____.

1. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled / are being fulfilled and that I have exercised that following checks to see that the money was actually utilised for the purpose for which it was sanctioned .

Kinds of checks exercised.

1. Signature

_____

2.

3. Designation

_____

4.

5. Date _____

13. ATL would also put in place mentors/volunteers for hand-holding and guidance in either an online or face-to-face environment.

14. ATL should develop network with industries, academia, research, civil society for knowledge sharing and mentoring support.

15. The faculty would ensure safety of the students during the working hours of ATL.

16. In order to foster inventiveness among students, the following activities could be conducted by ATL:

    a) Monthly programs to teach and explain students about different concepts – ranging from ideation, design, proto-typing, networking to physical computing.
    b) Periodic regional and national level competitions.
    c) Periodic exhibitions / fairs / carnivals.
    d) Workshops on problem solving, designing and fabrication of products.
    e) Interactions with relevant stakeholders including industry, academia and students from other schools and colleges and universities.
    f) Screening of films and organising popular STEM and entrepreneurship talks by reputed speakers.
    g) Summer and winter camps.

17. Operation of the ATL would be monitored on a suitable periodic basis by an advisory body comprising of following suggested members:

    a) Principal of the school – Chairman
    b) Faculty in-charge of the ATL – Convenor
    c) Representative from local industry / local community /young innovators / reputed academia / alumni – Three Members

18. The advisory body will be constituted by the applicant school. It will meet at least thrice in a year and send its report to AIM Directorate.

19. The applicant school will maintain separate accounts for the grant and contributions received from other sources. The funds released should be kept in a bank account earning interest; the interest earned should be reported to the AIM, NITI Aayog and the same will be treated as a credit to the organization and will be adjusted towards further instalments of the grant, if any.

20. The grant being released should be exclusively spent on the specified purpose for which it has been sanctioned within the stipulated time. Any unspent balance out of the amount sanctioned should be refunded to the Government of India by means of an Account's Payee Demand Draft drawn in favour of Drawing and Disbursing Officer, NITI Aayog, payable at New Delhi.

21. The advisory body of the ATL is required to upload each of i) annual implementation report providing information on the activities conducted; and ii) Utilization Certificate (Annex VII) of the GOI Grant, in the prescribed pro-forma, to Atal Innovation Mission,

NITI Aayog at the end of each financial year as well as at the time of seeking further instalments of the grant, if any.

22. Concerned officers of Atal Innovation Mission, NITI Aayog or its authorised representatives may visit the ATL periodically for ascertaining the progress of work and resolving any difficulties that might be encountered in the course of implementation.

23. AIM, NITI Aayog reserves the right to terminate support to the project at any stage, if it is convinced that the grant is not being utilised properly or that appropriate progress in the project work is not being made.

24. The brand name 'Atal Tinkering Laboratories' will be withdrawn in case of non-performance of these laboratories.

25. In case of any dispute, the same shall be subject to the jurisdiction of the court of Delhi.

Guidelines for setting up of Tinkering Laboratories

under Atal Innovation Mission –

'Atal Tinkering Laboratories'

Government of India
NITI Aayog
Atal Innovation Mission

May 2016

Government of India
NITI AAYOG
Atal Innovation Mission

GUIDELINES FOR SETTING UP OF ATAL TINKERING LABORATORIES (ATL)

1.0 Background

1.1. The Government of India has setup the Atal Innovation Mission (AIM) at NITI Aayog. Realising the need to create scientific temper and cultivate the spirit of curiosity and innovation among young minds, AIM proposes to support establishment of a network of Atal Tinkering Laboratories (ATL). ATL is a work space where young minds can give shape to their ideas through hands on do-it-yourself mode and learn innovation skills. The vision is to 'Cultivate 1 Million children in India as Neoteric[1] Innovators'.

2.0 Objectives

2.1. The objective of this scheme is to foster curiosity, creativity and imagination in young minds and inculcate skills such as design mind-set, computational thinking, adaptive learning, physical computing etc. Young children will get a chance to work with tools and equipment to understand what, how and why aspects of STEM (Science, Technology, Engineering and Math).

3.0 Features of Scheme

3.1. ATLs can be established in schools (Grade VI – XII) managed by Government, local body or private trusts/society.

3.2. Minimum 25% of the ATLs would be set up in schools managed by Government (Central / States)

4.0 Funding Support

4.1. The applicant schools would be provided financial support in the form of Grant-in-aid for a maximum period of 5 years.

4.2. Key aspects of funding ATLs in schools:

a) One time establishment charge of up to Rs. 10.0 lakh would be provided for each ATL in the first year for instruments, equipment like do-it-yourself kits, 3D printer, etc. An illustrative list of equipment and kits is at Annex IV. A checklist of mandatory equipment and other infrastructure would be communicated to selected schools. The schools will procure equipment and kits at their end, however the AIM will fix their rates.

b) An amount of Rs. 10.0 lakh would be provided for each ATL over a maximum period of 5 years for operation of ATLs, maintenance of equipment, purchase of

[1] Neoteric means a person who advocates new ideas

consumables, organising popular science lecture series and other scientific activities, competitions and payment of honorariums to the faculty and mentors involved.

4.3. Contributions from philanthropic and other institutions and under Corporate Social Responsibility (CSR) would be encouraged for financing / upgrading ATLs. Local Industry / Institution will be encouraged to support the initiative by creating subject/domain specific exhibits/tinkering laboratory facilities.

5.0 Infrastructure

5.1. The applicant school would have to provide at least 1,500 sq. ft. of built up space. The existing facilities for meeting rooms and video conferencing among others can be used to supplement the laboratory space.

6.0 The program of establishment of ATLs across the country would be handled by a National Coordinator (NC) in AIM Directorate.

7.0 Applicant schools intending to establish ATLs may visit http://www.niti.gov.in and submit their application online to the Atal Innovation Mission, NITI Aayog. The prescribed application formats are at Annex III. Necessary documents can also be uploaded online.

8.0 The applications would be evaluated based on Selection Criteria (Annex II).

9.0 Short listed schools will be invited to participate in an Innovation Contest which will be informed by AIM. Each school will form groups of maximum 3 students and send one entry for the contest. The entries will be judged on the basis of following parameters:

a. Novelty of innovation in identified areas
b. Clarity of expression
c. Demonstration
d. Potential impact

10.0 Teams of top 3 entries will be given an opportunity to participate in Intel Science and Engineering Fair.

11.0 Selected Schools will be required to enter into a Memorandum of Understanding (MoU) (Annex V) and Bond (Annex VI) with AIM Directorate.

12.0 The above Scheme and guidelines are subject to periodic review in consultation with stakeholders.

13.0 The Terms and conditions of the scheme are in Annex I.

ANNEX I

TERMS & CONDITIONS

1. The purpose of this document is to provide information to the interested applicants for the submission of their application form. It is neither an agreement nor an offer made by AIM.
2. All communications related to the scheme including announcements of shortlisted applicants and final selection of applicants will be published on the NITI Aayog website.
3. AIM does not make any representation or warranty as to the accuracy; reliability or completeness of the information in this document and it is not possible to consider particular needs of each applicant.
4. No applicant shall submit more than one application.
5. The issue of these guidelines does not imply that AIM is bound to select an applicant. AIM reserves the right to accept/reject any or all of proposals submitted in response to the document at any stage without assigning any reasons whatsoever.
6. AIM's decision will be final and no explanation or justification for any aspect of the selection process will be given.
7. Applicants shall bear all costs associated with the preparation and submission of their proposals, and their participation in the selection process.
8. Applicants may seek clarification on the guidelines within five days from the date of issue of guidelines. Any request for clarification must be emailed to md-aim@gov.in.
9. Applicant schools would be required to put in place the requisite physical infrastructure such as laboratory and workshop facilities, computer lab with internet within a period of 6 months from the date of release of funds. Other desirable facilities including meeting room and video conferencing facility to chat with experts in real time can also be set up by the schools, if possible.
10. ATL would contain educational and learning 'do it yourself' kits and equipment on – science, electronics, robotics, open source microcontroller boards, sensors and 3D printers etc. An illustrative list of equipment and kits is described in Annex IV. This list shall be updated regularly. The schools are also free to purchase any other equipment or kit, if required.
11. The timings of ATL should be such that it allows students to come after working hours of the host institution (Applicant) to experiment and tinker. During working hours, specific time periods can be defined and included in the curricula of different grades to introduce the concept of tinkering laboratories.
12. Applicant schools would be required to identify and appoint adequate number of faculty members who would be responsible for managing the day-to-day operations of the laboratory.