Ascender The

## Newsletter (Electronic Issue)

## November 2020

**National Informatics Centre** 

"Science without religion is lame,

religion without science is blind."

- Albert Einstein

**Odisha State Centre** Unit - IV, Sachivalaya Marg,

Tel: +91 - 674 - 2508438

Bhubaneswar -751001

• www.nic.in

www.gov.in

e-Mail : sio-ori@nic.in



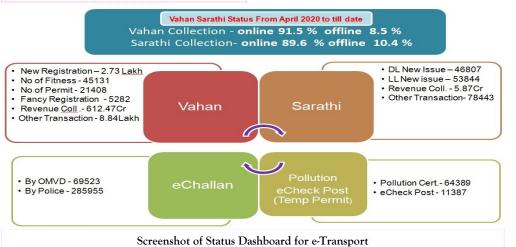
## e-Transport of NIC enables Govt to unveil new Services for Citizen

The e-Transport is a country wide Mission Mode Project of NIC, which successfully automated has the operations of Regional Transport Offices (RTOs) across the State. The project has set up a consolidated nationwide transport database with realtime update and availability.

In Odisha, the e-Transport project has an extensive array of G2G, G2B and G2C services, benefitting citizens, transporters, vehicle dealers. manufacturers, police, banks and insurance companies along with various Government Departments. The centralized, web enabled versions have applications viz. Vahan, Sarathi, e-Challan, e-Checkpost, Fancy Number Auction, and Advance Number Booking System, Online pollution certificate & mParivahan the mobile app with number of online services including epayment and appointment booking system that reduces/eliminate footfall at RTO offices to enhance the quality of services.

Odisha is the first state to implement Dealer Point Vehicle Registration with Auto number generation and document upload using Digital Signature. Apart from this online non-use and intimation of Vehicles. continuation The owner gets the acknowledgement from VAHAN application in the same day. In an improved VAHAN system in Odisha all types of Vehicle permits such as Goods Carriage Permit, Contract Carriage Permit, Special Permit, Public Service Vehicle Permit etc are auto approved digitally to make the process contactless, paperless and hassle free for the stakeholders at the Regional Transport Offices.

eCheckpost for online payment of Short Term Tax of Non-transport Vehicles / Private Vehicles of other State has been implemented in the State.



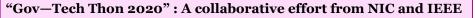
Citizen can apply for International Driving Permit online uploading the required documents, pay fee and book slot at their place of convenience by

visiting the portal (https:// parivahan.gov.in). All payment by citizen and stake holders related to e-Transport can be made by online.



A PAN India, 36 hours' virtual Hackathon. "Gov TechThon 2020" was organised by IEEE in collaboration with NIC for seeking innovative approach to solving the real time challenges of Ministries of Agriculture, Education and Transportation. This was the virtual hackathon open to the public and was unique of its kind setting a milestone in organising a virtual event.

The Secretary (MeitY) was the Chief Guest and kicked off the event. Amongst the dignitaries present were Dr Antriksh Johri, Director-IT, CBSE, Shri Shailender Kumar, Vice President and Regional Managing Director, Oracle India, Dr Neeta Verma, DG, , Dr. Trilochan Mohapatra, NIC Secretary (DARE) & Director General (ICAR) along with the Juries and Mentors from NIC, IEEE and Oracle.





'Gov-Tech thon 2020' launched by The Secretary, MeitY in presence of DG, NIC

One of the problem statement was "Blockchain in Seed Certification". The Agriculture Automation Team (AAT) of NIC, Odisha has implemented the automation of seed certification in Odisha as well as Uttarakhand. Considering the expertise, AAT, Odisha selected for mentoring was the participating team on the process flow, which stood third in the rank delivering a Blockchain solution in this hackathon.

Dr Neeta Verma, Director General, NIC addressing the while Valedictory function of Gov Tech-Thon 2020, said that these virtual hackathon displayed a unique combination of Social Sector and Emerging Technologies. She also highlighted that the Hackathon has use enabled of Emerging the Technologies for social inclusion, empowerment of people & overall upliftment of the nation.



Pictorial depiction of eAbkari : its Orientation and Outcome

**eAbkari** : An emerging application having suite of nearly 60 business/government eServices is in operational mode in excise operations across the country. Originated as eAbgari from NIC West Bengal, Odisha excise became the first the State to implement the same as eAbkari.

The umbrella of this unified portal covers almost all functions of excise department whether it is a Administrative function, Business Function, Regulatory Function, Financial Transactions or Stock management function.

The application facilitates the Prime objective of Excise department like controlling production, manufacture, possession, transport, purchase, and sale and consumption of intoxicating liquor including Industrial usage. It is also successful in prevention of clandestine transport of spirit.

The joint team of West Bengal and Odisha have been successful in implementing eAbkari in the State of Odisha. Excise Department, where previously ICT intervention was it's minimum, achieved almost 100% scoring both in State Reforms Action Plan (SRAP) and Business Reforms Action Plan (BRAP) which was lauded both by Principal Secretary, Excise Department and Principal Secretary, Industry department, Govt. of Odisha. Seeing the success story, Excise Department Govt. of Madhya Pradesh team recently visited Odisha for modalities of implementation and joint team of NIC, WBSU and NIC, Odisha presented the same to Excise Department of MP and J&K as well.



In the current time when people are getting closer and connected with the emerging social networking tools and underlying technologies, the world of devices is not sitting idle either. Devices are also getting closer and connected with the emerging IoT based tools and technologies. Now electronics devices are bearing IP addresses like any other computers in a network and they can send data from and to other devices. Saying this, home appliances can correspond with each other.

In this connected world of devices, the role of a micro controller is very critical from the perspective of Size, Performance and cost. Many different micro controller units (MCU) are available like Arduino, Raspberry Pi, Intel Galileo etc keeping eyes on different use cases and priority features. But a new and promising MCU is ESP32 low-cost system-on-chip (SoC) series which is an improvement on the popular ESP8266 which is widely used in IoT projects. The ESP32 has both Wi-Fi and Bluetooth capabilities, which make it an out of the box chip for the development of IoT projects. Engineered for mobile devices, wearable electronics and IoT applications, ESP32 achieves ultra-low power consumption.ESP32 is highly-integrated with in-built antenna switches, RF balun, power amplifier, low-noise receive amplifier, filters, and power management modules. The program for the MCU can be written using the most popular Arduino IDE so the developer's ecosystem is available as legacy. The two emerging areas IoT and Cloud computing can be combined together using ESP32-Azure IoT Kit which enables smart network configuration, cloud platform access and sensor data acquisition. It features low-power sleep and wake-up modes as well. ESP32, with miniature in size and operating temperature ranging from  $-40^{\circ}$ C to  $+125^{\circ}$ C, is a versatile MCU for IoTs.

