



Lok Sabha passes the Aadhaar And Other Laws (Amendment) Bill, 2018

Lok Sabha has recently passed the Aadhaar And Other Laws (Amendment) Bill, 2018.

- The Bill aims to amend three existing laws: The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, The Indian Telegraph Act, 1885, and The Prevention of Money Laundering Act, 2002.
- The Bill is brought to modify existing laws to implement the [Supreme Court's judgment \(September 2018\)](#) which upheld Aadhaar but limited its use for only certain subsidies and schemes funded by the Consolidated Fund of India and disallowed private companies from seeking Aadhaar for authentication.

Provisions of the Bill

- **Enrolment of Children:** Permits the enrolment of children to the scheme with the consent of their parents or guardian.
 - Children can opt out of Aadhaar on attaining majority.
- **Offline verification:** The Bill permits offline verification, i.e. the use of Aadhaar number to establish an identity without authentication using biometric data or other electronic means.
 - As per the present Act, Aadhaar number without electronic authentication cannot be used to verify the identity.
- **Virtual ID:** The Bill changes the definition of 'aadhaar number' to include 'virtual ID', in addition to the 12 digit number. The 16-digit Virtual ID enables one to authenticate identity without providing aadhaar number.
- **High Court judge can order disclosure:** The authority which can issue orders to disclose Aadhaar information is proposed to be changed as 'High Court judge' from 'District Judge'.
- **The right of hearing before disclosure order:** The Bill states that the holder of the Aadhaar number should be heard before issuing such order.
- **Secretary authorized to order disclosure in the interest of national security:** The authority which can issue orders of disclosure of Aadhaar information in the interests of national security is proposed to be changed to the officer of the rank of "Secretary" from "Joint Secretary".
- **No denial of services due to authentication failure:** The Bill clarifies that failure in authentication of Aadhaar number due to old age, sickness, or technical reasons should not result in denial of any service, benefit or subsidy. It states that alternate means to verify identity should be used in such cases.
- **Civil penalties:** The Bill proposes civil penalties for collection, use, and disclosure of Aadhaar information in contravention with the violation of the provisions of the Act.
- The maximum penalty proposed is Rs. one crore.
- **Section 57 Omitted:** Section The Bill proposes to omit Section 57 of the Aadhaar Act that permitted private entities to use Aadhaar number for authenticating identity before providing services.
- **Amending Telegraph Act:** The Bill proposes to amend the Indian Telegraph Act 1855 to provide for voluntary use of Aadhaar number for identity verification by the telecom companies. However, the Bill does not say that Aadhaar has to be compulsorily used for verification.
- **Bank Accounts and Aadhaar:** The Bill proposes an amendment to the Prevention of Money Laundering Act to permit voluntary use of Aadhaar for identity verification by banks before opening bank accounts. Aadhaar is specified as one of the means of identity verification, and there is no compulsion to use it.

- **UIDAI Fund:** Under the Act, all fees and revenue collected by the UIDAI shall be credited to the Consolidated Fund of India.
 - The Bill removes this provision and creates the Unique Identification Authority of India Fund.
 - All fees, grants, and charges received by the UIDAI shall be credited to this fund. The fund shall be used for expenses of the UIDAI, including salaries and allowances of its employees.
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Section 66A of IT Act

The Supreme Court sought the Centre's response to a plea alleging that **despite the striking down of draconian Section 66A of the IT Act in 2015 by the apex court**, police in various states were still invoking it in FIRs to clamp down on free speech on social media platforms.

- The petition said a recent working paper by the **Internet Freedom Foundation** demonstrated that pending prosecutions under Section 66A had not been terminated, and further it continued to be invoked by police across India in FIRs registered after the 2015 judgment.
- The petition said there had been a **huge communication gap** at the ground level and many officials may not even know about the Supreme Court verdict.
- It said trial courts and prosecutors were **not actively implementing the verdict** and the burden of terminating illegal prosecutions **based on Section 66A fell on the accused persons.**

Background

- Section 66A dealt with **information related crimes** in which sending information, by means of a computer resource or a communication device, which is inter alia offensive, derogatory and menacing is made a punishable offence.
 - In **Shreya Singhal v. Union of India** judgement, Justices Rohinton F. Nariman and J. Chelameswar had observed that the weakness of Section 66A lay in the fact that it had **created an offence on the basis of undefined actions:** such as **causing "inconvenience, danger, obstruction and insult"**, which **do not fall among** the exceptions **granted under Article 19** of the Constitution, which guarantees the freedom of speech.
 - The court also observed that the challenge was to **identify where to draw the line.** Traditionally, it has been drawn at incitement while terms like obstruction and insult remain subjective.
 - In addition, the court had noted that **Section 66A did not have procedural safeguards** like other sections of the law with similar aims, such as :
 - The need to obtain the concurrence of the Centre before action can be taken.
 - Local authorities could proceed autonomously, literally on the whim of their political masters.
 - The judgment had found that **Section 66A was contrary to both Articles 19 (free speech) and 21 (right to life) of the Constitution.** The entire provision was struck down by the court.
 - After that government had appointed an expert committee (**T.K. Viswanathan committee**) which proposed a legislation to meet the **challenge of hate speech online.**
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IIT Madras Team Produces Gas Hydrates

A team of Indian researchers at Indian Institute of Technology, Madras has synthesized in a lab tiny water cages containing trace amounts of methane and carbon dioxide at extremely low temperatures and

pressure to simulate the conditions of deep space.

- These tiny cages are known as Clathrate Hydrates or Gas Hydrates.
- Normally, the formation of clathrate hydrates requires high pressures and moderate temperature.
- This discovery of hydrates is unexpected at extremely low pressures and ultracold temperatures as cages of water are not expected to form under such conditions.
- At low temperature, both ice and methane are in a frozen state, prolonging the experiment at a very low temperature enhanced the mobility of methane molecules and led to their insertion into the cage of water molecules to form methane hydrate.

Clathrate Hydrates

- Clathrate hydrates are solid cages of water containing small non-polar molecules like carbon dioxide and methane.
- Clathrate hydrates are formed when a gas such as methane gets trapped in well-defined cages of water molecules forming crystalline solids. In terrestrial conditions, gas hydrates are formed naturally under the seabed and glaciers under high pressure, low-temperature conditions.
- On earth, they are found on the ocean floor or the permafrost region of the earth.

Uses of Clathrate Hydrates

- Hydrates are considered as the future sources of fuel. Many countries, including India, have started projects to explore hydrates present on the ocean bed.
- They could be a potentially safe, efficient method for storing and **transporting gases**.

Significance

- Carbon Sequestration
 - Trapping carbon dioxide in hydrates can be a way to reduce to global warming in future. As one can sequester carbon dioxide gas as solid hydrates under the seabed.
- Sustainable Energy source
- Development of technology to harvest Gas Hydrates can ensure energy security of the nation.

Gas hydrate exploration in India

- Under the aegis of the **Ministry of Earth Sciences**, Government of India, **a comprehensive research-oriented gas hydrates program was launched during the 11th plan (2007-12)** period emphasizing scientific and technology development with following major objectives:
 - Understanding the nature of distribution of gas hydrates in marine sediments
 - Developing techniques for detection and quantification of gas hydrates
 - Identifying promising sites on the regional scale and estimating the resource potential
 - Recommending suitable sites for drilling and ground truth validation
 - Demonstrating occurrences of gas hydrates
 - Understanding the mechanism for the formation and accumulation of gas hydrates
 - Studying the impact of hydrate dissociation on climate and geological environment
 - Developing environment-safe technology for commercial production on a pilot scale
 - Developing hazardless and cost-effective transportation of gas from gas hydrates and
 - Monitoring environmental perturbation during harvesting of gas hydrates
 - National Centre For Polar And Ocean Research (NCAOR), Ministry of Earth Sciences has been identified as the nodal agency responsible for implementation of the scientific aspects of the study.
 - **National Gas Hydrate Programmes (NGHP)**
 - The programme was initiated in **1997** with a Steering Committee and a Technical Committee.
 - National Gas Hydrate Programme (NGHP) is steered by the **Ministry of Petroleum and Natural Gas** and technically coordinated by Directorate General of Hydrocarbons (DGH).
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Tallying of VVPAT with EVMs

The Supreme Court has directed the [Election Commission](#) to respond to a plea that the counts from Electronic Voting Machines (EVMs) and voter verifiable paper audit trail (VVPAT) units should be **cross-verified in at least 30% randomly chosen polling stations** in each Assembly and Lok Sabha constituency.

- At present **only 10% of the VVPAT** and vote counts from EVMs are cross verified.
- Apart from increasing the mandatory tallying of VVPAT with EVMs, the SC issued notice to EC on **two other related issues**:
 - Directions to make it **mandatory for Returning Officer** to order **hand-counting of all the VVPAT slips** of every polling station where the margin of victory is very narrow, **less than 3%**.
 - Making it **mandatory for the poll panel** to ask Returning Officer to order **hand-counting of all VVPAT slips** of all the polling stations where the discrepancy between the machine-counting total and the hand-counting total in **respect of the 5% sample EVMs taken together is more than 1%**.

Background

- The Supreme Court in its judgment in **Subramanian Swamy versus ECI, 2013**, had held that it was imperative that elections held through EVMs ought to implement a mechanism of voter verifiable paper audit trails so that the **voter can satisfy himself that his vote was accurately recorded**.
- The mechanism for random cross-verification of EVM and VVPAT counts was placed in order to **detect any technological mischief or mal-programming of EVMs**.

Voter Verified Paper Audit Trail

- VVPAT is an **independent verification printer machine** and is attached to electronic voting machines. It allows voters to verify if their vote has gone to the **intended candidate**.
- When a voter presses a button in the EVM, a paper slip is **printed through the VVPAT**. The slip contains the **poll symbol** and **name of the candidate**. It allows the voter to verify his/her choice.
- After being visible to the voter from a glass case in the **VVPAT for seven seconds**, the ballot slip will be cut and dropped into the **drop box in the VVPAT** machine and a beep will be heard.
- VVPAT machines can be **accessed by polling officers only**.

Important Facts for Prelims (8th January 2019)

Wayanad Wildlife Sanctuary [//](#)



- The seasonal migration of wild animals from wildlife sanctuaries in Karnataka and Tamil Nadu to the Wayanad Wildlife Sanctuary (WWS) has begun.
- It is part of **Nilgiri Biosphere Reserve** along with Mudumalai Wildlife Sanctuary, Bandipur National Park, Nagarhole National Park, Mukurthi National Park and Silent Valley.
- Wayanad Wildlife sanctuary is significant because of **ecological and geographic continuity with other protected areas** such as Bandipur Tiger Reserve and Nagarhole N.P., of Karnataka in north-eastern portion and Mudumalai Tiger Reserve of Tamil Nadu in south-east.
- It has the **world's largest recorded population of Asiatic elephant**.
- Almost the entire Wayanad district is drained by **Kabini** and its three tributaries, the Panamaram, Mananthavady, and Kalindy rivers.
 - The Kabini River, one of the **three east flowing rivers of Kerala**, is an important tributary of the Kaveri River.