

[Official Statistics: Weekly rainfall and river flow summary: 22 to 28 February 2017](#)

Following a wet week across England, particularly in the north-west, river flows are mainly normal or higher for the time of year.

[Wheat and Pulses have register record sowing in term of area](#)

As per preliminary reports received from the States, the total area sown under Rabi crops as on 3rd February 2017 stands at 645.12 lakh hectares

[News story: Young innovators recognised in Forbes 30 under 30](#)

Eleven UK-based start-ups that have received Innovate UK support were named in the list of business and industry figures to watch in 2017.

[Forbes 30 under 30 Europe 2017](#) highlights the brightest young entrepreneurs, innovators and game changers with the potential to change the world. Across 6 of the 10 industry categories in Europe, 11 of the projects honoured have received Innovate UK support.

Winning projects

Industry

- Susan Graham, co-founder of [BioCarbon Engineering](#), which uses drones and remote sensing to restore woodlands and forests by planting trees quickly and cheaply

Retail and ecommerce

- Freddy Macnamara, founder of [Cuvva](#). Cuvva's car insurance model is

designed to more accurately represent drivers' risk profiles. It allows customers to insure their parked car for a base fee and only pay extra when they drive it

Media

- David Benigson, CEO of [Signal](#), which uses artificial intelligence (AI) to provide hyper-relevant real-time content and news to businesses

Science and healthcare

- Amrit Chandan and Carlton Cummins, co-founders of [Aceleron](#). This partnership is working to convert end-of-life electric vehicle batteries into safe, cost-effective energy storage for developing regions
- Alex Bond, CEO of [Fresh Check](#). With fellow Imperial College PhD students, Alex has developed a simple colour-change system for food packaging that alerts consumers to bacterial contamination

Social entrepreneurs

- Julian Melchiorri, founder of [Arborea](#), which is working to develop biotechnology solutions for urban pollution and wastewater treatment. Its BioSolar Leaf mimics photosynthesis to support energy producing, carbon-neutral buildings
- Elena Dieckmann and Ryan Robinson, co-founders of [Aeropowder](#), who are looking to repurpose feathers from the poultry industry that have traditionally gone to waste, and exploit the naturally high-performance material into new products
- Tom Webster, co-founder of [GrowUp Urban Farms](#). With his co-founders Tom has developed an aquaponics system for the sustainable, year-round farming of produce and fish, allowing consumers to locally source their food

Technology

- Victor Dillard and Edward Perello, co-founders of [Desktop Genetics](#). The University of Cambridge postgrads marry software innovation with life sciences. They are building an AI to re-engineer the human genome and treat genetic causes of disease
- Ankur Modi, co-founder of [StatusToday](#), offers an AI tool that gives business managers insight into their employees, helping them to improve performance and recognise threats
- Timothy Sadler, co-founder, [CheckRecipient](#), which uses AI to spot and prevent email data breaches and loss before it happens

How we support businesses

These innovators have benefitted from a variety of Innovate UK programmes, including direct competition funding, innovation vouchers and knowledge transfer partnerships, which connect businesses with a university and recently-qualified graduate to bring in new knowledge.

Elena Dieckmann of Aeropowder was one of the winners in our [women in innovation](#) competition, receiving £50,000, a tailored business support package and mentorship. The competition aimed to challenge the low number of female entrepreneurs in the UK and encourage diversity.

[News story: New transparency measures for Taser use announced by Home Secretary](#)

The Home Secretary has today announced police forces will be required to collect and publish detailed data on all their use of force, including Taser usage, from April.

Adopting the recommendations of the David Shaw review into police use of force, Amber Rudd said officers will have to record the location and outcome of all CED usage, along with the ethnicity and age of those involved, with the first set of data being published locally by forces this summer.

And she said the new rules being introduced would allow the increased safeguards and transparency required for the introduction of the new Taser X2 device.

All police use of force, including physical restraint, will be captured in the new statistical publications – to be collected from April 1 and published by forces from July onwards.

The increased transparency and scrutiny will allow meaningful comparison of the effectiveness of different techniques and tactics for the first time.

Home Secretary Amber Rudd said:

We ask the police to put themselves in harm's way to defend us and the use of force is a vital part of their powers.

But when the police take the difficult decision to deploy force it is also vital that the people they serve can scrutinise it.

These new rules will introduce unprecedented transparency to this important subject and reinforce the proud British model of policing by consent.

The government is committed to improving the transparency and accountability of the police's use of force.

In 2014, the then Home Secretary, Theresa May, asked former National Police Lead for Conflict Management, Chief Constable David Shaw, to lead a review into what data should be recorded and published.

Work has been undertaken by police forces to implement the new data collection system recommended by the review by 1 April 2017. Forces will publish the information locally on a quarterly basis, and provide an annual snap-shot of the key information collected to the Home Office as part of the Annual Data Requirement for 2017/18.

For the first time, these data will allow meaningful comparison of the effectiveness of different techniques – which will strengthen police training, tactics, decision-making, and equipment procurement.

In authorising the new Taser, the Home Office has supported the police in an open and transparent procurement exercise to identify a new device that will eventually replace the current TASER X26.

As with the authorisation process for all less-lethal weapons, the X2 has undergone extensive evaluation. A full technical evaluation has been carried out by the Centre for Applied Science and Technology (CAST), and the results of that, user handling trials, training and guidance materials were submitted for an independent medical assessment by the Scientific Advisory Committee on the Medical Implications of Less-Lethal Weapons (SACMILL).

The Committee confirmed that the medical implications of the TASER X2 are in line with those expected of a less-lethal weapon of this type.

Details of all CED deployments will be recorded by the police and shared with SACMILL on a regular basis to ensure its findings remain accurate.

Minister for Policing and the Fire Service Brandon Lewis said:

The government is committed to giving the police the tools they need to do their job effectively – we must ensure our officers have access to the best, and most up-to-date technology available.

Tasers are an important tactical option for the police, particularly in potentially violent situations where other tactics have been considered or failed.

All officers who use Tasers have to go through a comprehensive training process. This includes training officers to factor in the potential vulnerability of the person and factors such as age and stature when assessing each situation.

David Shaw was Chief Constable for West Mercia until July 2016. You can read his [use of force data review](#).

Read the [TASER X2 SACMILL medical assessment](#).

Union Budget lays a Foundation of Steel to the Growth of India – Chaudhary Birender Sing

The Union Budget 2017-18, presented in the Parliament on 1st February 2017 is a forward looking budget directed towards raising