Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

discontinuing seasonal changes of time and repealing Directive 2000/84/EC

(Text with EEA relevance)

{SWD(2018) 406 final}
EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL
   • Reasons for and objectives of the proposal

EU summer-time arrangements imply that clocks are changed twice per year in order to cater for the changing patterns of daylight and to make the best of the available daylight in a given period. Clocks are advanced by one hour in the morning of the last Sunday of March and set back by one hour in the morning of the last Sunday of October to return to standard time.

For historic reasons, Member States chose in the past to introduce summertime arrangements. Such arrangements were first adopted by Germany and France during the first World War to conserve coal, in particular the one consumed for lighting purposes. Britain, most of its allies, and many European neutrals soon followed suit still during wartime. Many European countries later abandoned the measure after the two World Wars ended. Modern summertime arrangements stem from 1970s, started by Italy (1966) and Greece (1971). The UK and Ireland abolished summertime arrangements in 1968 to harmonise with the rest of Europe but then switched back again in 1972. Spain started summertime in 1974, followed by France in 1976 citing energy savings as the objective. During 1976-1981, ten EU Member States introduced summertime arrangements, mostly to harmonise to neighbouring countries.

Internationally, summertime arrangements are observed in about 60 countries, including in North America and Oceania. However, a growing number of EU neighbours or trading partners have chosen not to apply or to abolish summertime arrangements: examples are Iceland, China (1991-), Russia (2011-), Belarus (2011-) and Turkey (2016-).

EU legislation on summer-time arrangements was first introduced in 1980\(^1\) with the objective of unifying existing national summer-time practices and schedules that were diverging, thereby ensuring a harmonised approach to the time switch within the single market. Since 2001, EU summer-time arrangements have been governed by Directive 2000/84/EC\(^2\), setting out the obligation on all Member States to switch to summer-time on the last Sunday of March and to switch back to their standard time ("winter-time") on the last Sunday of October.

In parallel to, and independent from, the EU summer-time arrangements, territories of the Member States on the European continent are grouped over three different time zones or standard times. The decision on the standard time is taken individually by each Member State, for its entire territory or for different parts of it\(^3\).

The system of bi-annual clock changes has been increasingly questioned, by citizens, by the European Parliament, and by a growing number of Member States. The Commission has, therefore, analysed available evidence, which points to the importance of having harmonised Union rules in this area to ensure a proper functioning of the internal market. This is also

\(^1\) OJ L 205, 7.8.1980, p. 17.
\(^3\) Territories of the Member States on the European continent today stretch over three time zones: Western European Time or Greenwich Mean Time (GMT), Central European time (GMT+1), and Eastern European Time (GMT+2). Eight Member States in the Union (Bulgaria, Cyprus, Estonia, Finland, Greece, Latvia, Lithuania and Romania) apply GMT+2 as their standard time. 17 Member States (Austria, Belgium, Croatia, Czech Republic, Denmark, France, Germany, Hungary, Italy, Luxembourg, Malta, the Netherlands, Poland, Slovak Republic, Slovenia, Spain and Sweden) apply GMT+1 and three Member States (Ireland, Portugal and United Kingdom) apply GMT. Specific arrangements apply, in particular, to the Azores and to the Canary Islands.
supported by the European Parliament⁴ as well as other actors (e.g. in the transport sector). The Commission has also carried out a public consultation, which generated around 4.6 million replies, of which 84% were in favour of discontinuing the bi-annual clock changes while 16% wanted to keep them. Moreover, the issue has been raised by transport ministers in recent meetings of the Council in June 2018 and December 2017, and a number of Member States have indicated their preference for discontinuing current summer-time arrangements.

Against this background, the Commission considers it necessary to continue safeguarding the proper functioning of the internal market through a harmonised scheme applicable to all Member States, taking account however of the recent developments described above. Consequently, the Commission proposes to discontinue the seasonal time changes in the Union, while ensuring that Member States retain the competence to decide on their standard time, in particular whether they will move to the standard time corresponding to their summer-time on a permanent basis or whether they will apply their current standard time permanently.

- **Consistency with existing policy provisions in the policy area**

The current proposal to stop the bi-annual switching of time requires that Directive 2000/84/EC is simultaneously repealed.

- **Consistency with other Union policies**

Evidence suggests that a harmonised approach in this area is necessary for the well-functioning of the internal market. By abolishing the bi-annual time switch for all Member States, this proposal will maintain a common rule in this area, which is essential for the proper functioning of the Union's internal market.

2. **LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY**

- **Legal basis**

The objective of this proposal is to ensure the proper functioning of the internal market. Article 114 TFEU is therefore the adequate legal basis. This is also the legal basis of Directive 2000/84/EC.

- **Subsidiarity (for non-exclusive competence)**

As indicated by evidence, it is important to have Union rules in this area to ensure the proper functioning of the internal market. Given the increased questioning of the current summertime arrangements, the only alternative available to continue ensuring a harmonised approach is a coordinated abolishment of bi-annual clock changes, as outlined in the current proposal. With a view to ensuring a continued harmonised approach, the Commission, therefore, proposes to discontinue seasonal clock changes in the Union, while leaving the decision to each Member State as to its standard time, and in particular as to whether it will change its standard time (one hour forward) to coincide with its current summer-time on a permanent basis, or whether it will apply the standard time that corresponds with its current "winter-time" on a permanent basis.

- **Proportionality**

The Commission's proposal respects the proportionality principle in that it does not go beyond what it necessary to achieve the objective of continuing to safeguard the proper functioning of registered owners.

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the internal market as regards time arrangements. For this purpose it provides for harmonised time arrangements in the Union, without removing the right of Member States to decide whether they apply summer-time or "winter-time". The proposal does not affect Member States' right to decide on the standard time or times to be applied in the territories under their jurisdiction.

- **Choice of the instrument**

Given that Member States remain free to choose their standard time or times and in particular, in 2019, will have to choose whether they will apply summer- or "winter-time" and given that it will be necessary to adopt provisions to such effect under national law, a Directive is the most adequate form for this proposal.

3. **RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS**

- **Ex-post evaluations/fitness checks of existing legislation**

Numerous studies have been carried out over the years on the EU summer-time arrangements. This includes various studies and reports contracted out or prepared by the Commission: for instance, an examination of the impact of EU summer-time arrangements on the main economic sectors as well on health and leisure in 1999, a Commission report on the impact of the summer-time Directive in 2007, and study of the possible implications of a non-harmonised summer-time system in the EU in 2014. In February 2016, the German Bundestag published a report on the impact of summer-time and, in October 2017, the European Parliament's Research Service presented a report summarising the latest state of play of existing evidence on summer-time.

In terms of impacts of summer-time arrangements, evidence as referenced in the above reports indicates the following:

- Internal market: At this juncture, evidence is conclusive on one point: that allowing uncoordinated time changes between Member States would be detrimental to the internal market due to higher costs to cross-border trade, inconveniences and possible disruption in transport, communications and travel, and lower productivity in the internal market for goods and services.

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5 Reincke and van den Broek, Research voor Beleid, Summertime, In-depth investigation into the effects of summer-time clock arrangements in the European Union, 1999 (study conducted for the European Commission)


Energy: Despite having been one of the main drivers of the current arrangements, research indicates that the overall energy savings effect of summer-time is marginal. However, results tend to vary depending on factors such as geographical location. Some reported examples in Member States include:

- The Italian TSO Terna reported in 2016, that the annual energy saving due to summer-time was about 580 GWh in Italy (~0,2% of the annual electricity consumption) that is an annual saving of around EUR 94,5 million.\(^\text{10}\)

- In France, ADEME (Agence de l'Environnement et de la Maitrise de l'Energie) estimated in 2010, that the savings in lighting were about 440 GWh (~0,1% of annual electricity consumption), with possibly some thermal savings. EDF estimated in 1995 that the savings were around 1200 GWh, the later estimates however are closer to the 2010 results.\(^\text{11}\)

- The German Association of Water and Energy Industries (BDEW) stated in 2015 that the savings in Germany have become irrelevant, since lighting energy has reduced to about 8% of the energy consumption, whereas the energy for leisure activities has increased.\(^\text{12}\)

- In Spain, the Institute of Diversification and Energy Savings (IDAE) reports for 2015 a reduction of 5% of total lighting electricity consumption due to summer-time, equivalent to an annual saving of EUR 300 million.\(^\text{13}\)

- The 2014 study commissioned by the Commission found that summer-time arrangements cause administrative problems for gas operators when placing bookings with Transmission System Operators.\(^\text{14}\)

The deployment of new technologies for lighting (and smart meters, programming devices, etc) already reduces the energy saving potential of summertime arrangements.

Health: Some studies indicate that summer-time arrangements could generate positive effects linked to more outdoor leisure activities. On the other hand, there are chronobiologic research findings that suggest that the effect on the human biorhythm may be more severe than previously thought. For instance, the Bundestag report of 2016 refers to findings which indicate that the human biological rhythm adjusts less well than previously thought to the spring clock change and that it may take certain chronotypes of people several weeks to adjust, while the autumn change poses fewer problems. However, the evidence on overall health impacts (i.e. the balance of the assumed positive versus negative effects) remains inconclusive.

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\(^\text{12}\) Presentation of Michael Wunnerlich, Bundesverband der Energie- und Wasserwirtschaft at 'Is it Time to Revisit summertime, Public Hearing by the Committees JURI, ITRE and TRAN’ on the 23/05/2015 at the European Parliament.


• Road safety: Evidence remains inconclusive with regard to the relationship between summer-time arrangements and road traffic accidents. Some studies show that sleep deprivation from advancing the clock in spring would increase the risk of accidents. It is, however, generally difficult to directly attribute the effect of summer-time arrangements on accident rates as compared to other factors.

• Agriculture: Summertime arrangements have raised concerns regarding disrupted biorhythm of animals and changing milking and feeding schedules due to the time switch. However, those concerns appear to progressively disappear due to the deployment of new equipment, artificial lighting and automated technologies.

• Stakeholder consultations
The Commission carried out a public consultation between 4 July and 16 August 2018 to gather the views of European citizens, stakeholders and Member States on the EU summer-time arrangements as set out in Directive 2000/84/EC and on any potential change to those arrangements, notably the abolishment of the bi-annual time switch.

Even though the consultation period was shorter than the standard 12 week period, around 4.6 million replies were received with over 99% of replies coming from citizens. Responses came from all Member States, even if response rates varied across countries: Germany, Austria and Luxembourg had the highest response rates, followed by Finland, Estonia and Cyprus. 84% of all respondents want to abolish the bi-annual time switch, while 16% want to keep it. Broken down by Member States, it shows that citizens and stakeholders in all Member States are overall in favour of abolishing the bi-annual clock change, except in Greece and Cyprus where a small majority of respondents prefer keeping current arrangements; in Malta it is close to half/half. In the public authorities' category, a majority also indicated their preference for abolishing the biannual time switch. The main reason given by respondents wishing to abolish the current system is human health, followed by lack of energy saving.

More details about the public consultation on EU summertime arrangements can be found in the accompanying report of results.15

• Impact assessment
The reason for legislating in this area at EU level has been to harmonise existing national summertime practices and schedules which were diverging. The Commission first brought up the issue of the adverse effects stemming from diverging national summer-time practices on the internal market – on cross-border transport, communications and commerce – in a Communication16 in 1975. The ICF study of 2014, commissioned by the Commission examined the (hypothetical) implications of non-harmonised summer-time schemes, notably on the functioning of the internal market but also on businesses and citizens, and concluded that asynchronous arrangements would generate higher costs, greater inconvenience and lower productivity in the internal market for goods and services.

Other studies17 also point to the benefits of a harmonised approach for the single market and to the risk of fragmentation in the absence thereof. In other areas, evidence either points to

15 SWD (2018) 406
17 For example, the European Parliamentary Research Service report of 2017
marginal impacts stemming from summer-time arrangements (e.g. relatively small energy savings effects) or it remains inconclusive (e.g. on overall health impacts, road safety).

In February 2018, the European Parliament's resolution asked the Commission to conduct an assessment of the Directive and, if necessary, come up with a proposal for its revision. At the same time, the resolution stated that "it is essential to maintain a unified EU time regime even after the end of biannual time changes".

The Commission's assessment is that common rules in this area remain critical to ensure the proper functioning of the internal market. The main policy alternatives to ensure such a harmonised regime are to 1) keep the EU summer-time arrangements as set out in Directive 2000/84/EC, or 2) discontinue the bi-annual time changes for all Member States; this would not affect the choice of time zone, and it would remain each Member State's decision whether to go for permanent summer-time (by changing their current standard time) or stay with so called "winter-time" (which corresponds to their current 'standard' time).

The Commission considers it necessary to act now in order to continue safeguarding the proper functioning of the internal market, while taking account of the most recent developments and avoid potentially significant disruptions in the internal market.

Based on the evidence available on the effects of the EU summer-time arrangements, as referenced above, the conclusion can be drawn that a continued harmonised regime – whereby all Member States abolish the bi-annual time changes – would remain beneficial for the functioning of the internal market. Effects on other areas are rather inconclusive and are likely to depend on the geographical location and whether Member States choose to stay with permanent summer- or permanent winter-time.

As already mentioned, the choice of the standard time and whether or not to go for permanent summer- or permanent winter-time is up to each Member State. The impact of this choice therefore needs to be assessed at national level. Overall, the impacts are likely to differ depending on the geographical situation of each Member State: The northern Member States already have a big seasonal change in available daylight in the course of the year. They consequently experience dark winters with little daylight and bright summers with short nights. For the more southern Member States, these differences are not as extreme, as day and night distribution does not change as much over the year. The location of countries within their time zone is also likely to be of great significance. The closer a country is located towards the West of the time zone, the later the sunrise and sunset occur, whereas on the Eastern side of the time zone, mornings will be lighter and the sun will set earlier.18

A change of system will also bring about transition costs. While the current costs generated by the bi-annual time switch will disappear, there would be transitional costs for switching to a new time regime without seasonal changes. IT systems would have to be reprogrammed and reconfigured. This will be critical for scheduling and calendaring software (health systems, travel booking systems) and time-dependent software as well as for "smart" technologies.19 In transport, timetables would need to be adjusted. As stressed by some stakeholders in response to the public consultation it will therefore be essential to give a certain lead time for such a change.

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18 See https://ec.europa.eu/transport/sites/transport/files/sunset-sunrise-table.pdf for more details on the timing of the sunrise and sunset in all European capitals, under a regime of permanent summer-time versus permanent standard (winter) time.

19 ICF International, The application of summertime in Europe: a report to the European Commission Directorate-General for Mobility and Transport (DG MOVE), September 2014
• Regulatory fitness and simplification
The proposal pursues the objective of increasing effectiveness and reducing regulatory and administrative burdens for businesses and citizens. It does so mainly by simplifying time arrangements in the Union, with the removal of regular seasonal time changes and the introduction of permanent time arrangements, which should be easier and less burdensome to implement.

• Fundamental rights
Not applicable.

4. BUDGETARY IMPLICATIONS
Not applicable.

5. OTHER ELEMENTS
• Implementation plans and monitoring, evaluation and reporting arrangements
In order to assess the impacts of this Directive, in particular as regards the effects on the functioning of the internal market, but also as regards impacts on stakeholders and the lives of citizens, the Commission will report on the implementation of this Directive to the European Parliament and to the Council, not later than 31 December 2024, at which time there should be sufficient information on its effects.

In order to enable the Commission to report on the impact of the Directive, Member States should provide assistance and all relevant information to the Commission as regards its implementation.

• Detailed explanation of the specific provisions of the proposal
Article 1(1), in conjunction with Article 4(1), provides that as from 1 April 2019 Member States will no longer apply changes to their standard time or times – for those Member States which for geographical reasons have several – which are linked to the seasons of the year. Member States would still make a switch to summer-time arrangements in accordance with Directive 2000/84/EC on 31 March 2019, after which they would no longer apply seasonal time changes as from 1 April 2019.

Article 1(2) provides Member States with the option to choose to make one more seasonal change of their standard time or times on Sunday, 27 October 2019, at 1.00 a.m., Coordinated Universal Time. As from that change, those Member States which chose to apply Article 1(2) would also no longer apply seasonal changes to their standard time.

Article 2 underlines that Member States remain free to make changes to their standard time which are not linked to seasonal changes. However, since unforeseen changes to standard time made by individual Member States could impact the proper functioning of the internal market, in order to avoid such disturbances Member States should inform the Commission in due time of their intention to change their standard time. From the moment when less than 6 months remain until a notified change takes effect, Member States should implement the notified changes to avoid legal uncertainty and possible further disruptions in the internal market. The Commission will inform all Member States and publish this information, so that national authorities, economic operators and citizens can be informed in an adequate and timely way and they can prepare for the change.
In order to evaluate whether the Directive has attained the above objective of safeguarding the proper functioning of the internal market and to assess its impacts, the Commission will, pursuant to Article 3, submit a report to the European Parliament and to the Council, on the basis of information provided by Member States, as well as other relevant information.

Article 4 provides that Member States shall transpose the Directive by 1 April 2019. This assumes swift adoption of the present proposal by the Council and European Parliament, by March 2019 at the latest. Member States shall apply the Directive from 1 April 2019. This means that Member States shall notify by 27 April 2019, based on possible consultations and assessments at national level and concertation with other Member States, whether, in October 2019, they intend to move on a durable basis to a standard time corresponding to their current "winter-time", rather than to their current summer-time.

From the entry into full application of this Directive Member States will no longer apply seasonal changes to their standard times pursuant to Directive 2000/84/EC. Therefore, Article 5 provides that it should be repealed.
Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

discontinuing seasonal changes of time and repealing Directive 2000/84/EC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,
Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,
Having regard to the proposal from the European Commission,
After transmission of the draft legislative act to the national parliaments,
Having regard to the opinion of the European Economic and Social Committee,
Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) Member States chose in the past to introduce summer-time arrangements at national level. It was, therefore, important for the functioning of the internal market that a common date and time for the beginning and end of the summer-time period be fixed throughout the Union. In accordance with Directive 2000/84/EC of the European Parliament and of the Council, all Member States currently apply summer-time arrangements from the last Sunday in March until the last Sunday in October of the same year.

(2) In its resolution of 8 February 2018, the European Parliament called on the Commission to conduct an assessment of the summer-time arrangements provided by Directive 2000/84/EC and, if necessary, to come up with a proposal for its revision. That resolution also confirmed that it is essential to maintain a harmonised approach to time arrangements throughout the Union.

(3) The Commission has examined available evidence, which points to the importance of having harmonised Union rules in this area to ensure the proper functioning of the internal market and avoid, inter alia, disruptions to the scheduling of transport operations and the functioning of information and communication systems, higher costs to cross-border trade, or lower productivity for goods and services. Evidence is not conclusive as to whether the benefits of summer-time arrangements outweigh the inconveniences linked to a biannual change of time.

(4) A lively public debate is taking place on summer-time arrangements and some Member States have already expressed their preference to discontinue the application of such arrangements. In the light of these developments, it is necessary to continue
safeguarding the proper functioning of the internal market and to avoid any significant disruptions thereto caused by divergences between Member States in this area. Therefore, it is appropriate to put an end in a coordinated way to summer-time arrangements.

(5) This Directive should not prejudice the right of each Member State to decide on the standard time or times for the territories under its jurisdiction and falling under the territorial scope of the Treaties, and on further changes thereto. However, in order to ensure that the application of summer-time arrangements by some Member States only does not disrupt the functioning of the internal market, Member States should refrain from changing the standard time in any given territory under their jurisdiction for reasons related to seasonal changes, be such change presented as a change of time zone. Moreover, in order to minimise disruptions, inter alia, to transport, communications and other concerned sectors, they should notify the Commission in due time of their intention to change their standard time and subsequently apply the notified changes. The Commission should, on the basis of that notification, inform all other Member States so that they can take all necessary measures. It should also inform the general public and stakeholders by publishing this information.

(6) Therefore, it is necessary to put an end to the harmonisation of the period covered by summer-time arrangements as laid down in Directive 2000/84/EC and to introduce common rules preventing Member States from applying different seasonal time arrangements by changing their standard time more than once during the year and establishing the obligation to notify envisaged changes of the standard time. This Directive aims at contributing in a determined manner to the smooth functioning of the internal market and should, consequently, be based on Article 114 of the Treaty on the Functioning of the European Union, as interpreted in accordance with the consistent case-law of the Court of Justice of the European Union.

(7) This Directive should apply from 1 April 2019, so that the last summer-time period subject to the rules of Directive 2000/84/EC should start, in every Member State, at 1.00 a.m., Coordinated Universal Time, on 31 March 2019. Member States that, after that summer-time period, intend to adopt a standard time corresponding to the time applied during the winter season in accordance with Directive 2000/84/EC should change their standard time at 1.00 a.m., Coordinated Universal Time, on 27 October 2019, so that similar and lasting changes occurring in different Member States take place simultaneously. It is desirable that Member States take the decisions on the standard time that each of them will apply as from 2019 in a concerted manner.

(8) Implementation of this Directive should be monitored. The results of this monitoring should be presented by the Commission in a report to the European Parliament and to the Council. That report should be based on the information that is made available to the Commission by the Member States in a timely fashion to allow for the report to be presented at the specified time.

(9) Since the objectives of this Directive as regards harmonised time arrangements cannot be sufficiently achieved by the Member States but can rather be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary to achieve those objectives.
The harmonised time arrangements should be applied in accordance with the provisions on the territorial scope of the Treaties specified in Article 355 of the Treaty on the Functioning of the European Union.

Directive 2000/84/EC should therefore be repealed,

HAVE ADOPTED THIS DIRECTIVE:

Article 1
1. Member States shall not apply seasonal changes to their standard time or times.
2. Notwithstanding paragraph 1, Member States may still apply a seasonal change of their standard time or times in 2019, provided that they do so at 1.00 a.m., Coordinated Universal Time, on 27 October 2019. The Member States shall notify this decision in accordance with Article 2.

Article 2
1. Without prejudice to Article 1, if a Member State decides to change its standard time or times in any territory under its jurisdiction, it shall notify the Commission at least 6 months before the change takes effect. Where a Member State has made such a notification and has not withdrawn it at least 6 months before the date of the envisaged change, the Member State shall apply this change.
2. Within 1 month of the notification, the Commission shall inform the other Member States thereof and publish that information in the Official Journal of the European Union.

Article 3
1. The Commission shall report to the European Parliament and to the Council on the implementation of this Directive by 31 December 2024 at the latest.
2. Member States shall provide the Commission with the relevant information by 30 April 2024 at the latest.

Article 4
1. Member States shall adopt and publish, by 1 April 2019 at the latest, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions. They shall apply those provisions from 1 April 2019.
   When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.
2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.
Article 5

Directive 2000/84/EC is repealed with effect from 1 April 2019.

Article 6

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

Article 7

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President