

# Compliance and Enforcement

How do countries ensure compliance with arms control agreements? This unit dives into the complexities of compliance, enforcement, verification, and international norms. The unit features real-world case studies and examines legal and political challenges related to arms control. It also explores global security dynamics and the role of institutions in ensuring compliance.

- 2 Concepts related to compliance and enforcement
- 4 International norms, compliance and enforcement
- 5 Institutions and tools relevant for compliance and enforcement
- 12 The role of national and international courts in compliance and enforcement
- 14 The role of the EU in compliance with and enforcement of non-proliferation and disarmament agreements
- 15 Reflections and outlook

**Elisabeth Hoffberger-Pippan**

Peace Research Institute Frankfurt  
(PRIF)

**Una Jakob**

Peace Research Institute Frankfurt  
(PRIF)

**Veronika Klymova**

Peace Research Institute Frankfurt  
(PRIF)

Cite as: Elisabeth Hoffberger-Pippan, Una Jakob and Veronika Klymova, "Compliance and Enforcement" in EUNPDC eLearning, ed. Niklas Schoernig, Peace Research Institute Frankfurt. Available at <https://eunpdc-elearning.netlify.app/lu-13/>, last modified 4 December 2025

The EU Non-Proliferation and Disarmament eLearning Course aims to cover all aspects of the EU non-proliferation and disarmament agenda. It's produced by PRIF with financial assistance of the European Union. The contents of individual learning units are the sole responsibility of the respective authors and don't necessarily reflect the position of the European Union.



Funded by  
the European Union

# 1. Concepts related to compliance and enforcement

After World War II something astonishing happened: The number of international agreements grew rapidly, despite the prevailing understanding that states are primarily guided by their own interests and that international agreements are rapidly abandoned when they become inconvenient. Compliance was often attributed to a coincidence of interests or to power alignments. From today's perspective, however, the predominant pattern of compliance with international agreements, even with limited enforcement, suggests that states comply when there is a need to address common problems that cannot be solved unilaterally and that reasons other than self-interest might induce compliance. Before we go into more detail, however, an awareness of some basic terms and their definitions is needed.

## Compliance

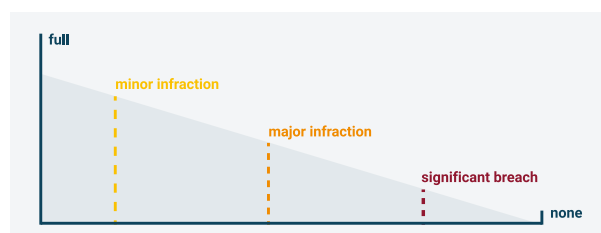
The term compliance refers to adherence to laws, regulations, norms, standards or guidelines set by an authority. Compliance often also means knowing what not to do. In the international arena, compliance is often considered a legal issue aimed at determining the extent to which an actor has followed the rules. Compliance is fundamental to maintaining order and protecting the public interest internationally. It is also essential to arms control, disarmament or non-proliferation agreements, since the security of states is at risk if others fail to comply.

Political science scholars and international lawyers have explored the conditions under which and the reasons why states comply with agreements even when enforcement or verification are difficult. For example, they may do so out of self-interest or fear of retribution, but also out of a desire for reciprocity, because of the impact of socially constructed international norms and due to concern for their reputation.<sup>[1]</sup>

Compliance depends on the political will of states as well as on the domestic administrative capacity to implement international obligations effectively. Compliance also depends on the perceived legitimacy of an obligation. When an agreement is perceived as an appropriate standard of behaviour, compliance with its provisions maintains states' reputation within the international community.<sup>[2]</sup>

## Degrees of non-compliance

Compliance and non-compliance are not binary but exist on a continuum ranging from full compliance to minor or major infractions to significant breaches.



Grüebelfabrik (CC BY-NC-SA)

Sometimes states strive to comply but fail because of domestic political realities, a lack of national capacity or technical issues. International treaties often allow for several interpretations,<sup>[3]</sup> resulting in one action being seen as non-compliance by some but as having been made in good faith by others. Or states may cheat intentionally. The notions of intent and good faith are thus important for understanding non-compliance.

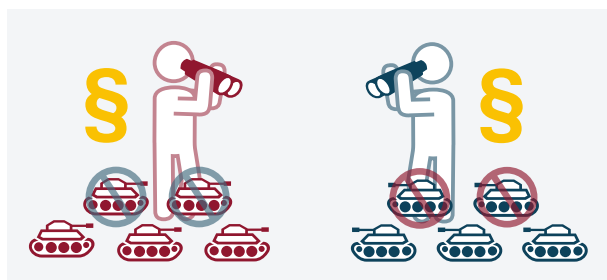
## Enforcement

Enforcement is the action taken by authorities to ensure adherence to laws, regulations or agreements. It can be viewed as a deterrent against non-compliance. It can also be used as a reaction to violations, as punishment for non-compliant behaviour or to bring a violator back into compliance. Enforcement strategies may include penalties, sanctions, legal action and other punitive measures. However, the threat or application of enforcement measures can also lead to political conflicts, as states may perceive them as infringements on their sovereignty.

Many international treaties do not have robust enforcement mechanisms, instead relying on the cooperation of member states.<sup>[4]</sup> Yet, these treaties often still have a high degree of compliance, which may be grounded in a state's self-interest, but also in their desire for reciprocity, adherence to international norms or concern for their own reputation.

## Verification

Verification is a cooperative process used to assess whether actors are complying with international agreements.

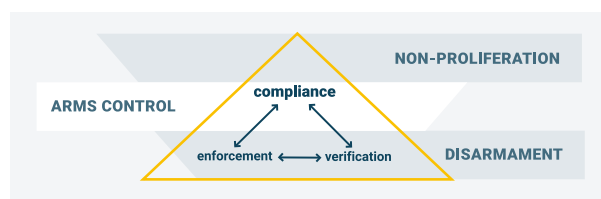


Grüebelfabrik (CC BY-NC-SA)

Verification mechanisms can include inspections, reporting, satellite monitoring and other forms of intelligence gathering, and the measures and processes can have varying degrees of intrusiveness. The purpose of these mechanisms is not simply information gathering but rather a targeted search for data corresponding to predetermined indicators of (non-)compliance. Objectives include increasing transparency, building trust among parties, and detecting and deterring non-compliance. However, verification processes are complex and politically sensitive. States may be reluctant to accept verification measures if they perceive them as too intrusive or if they fear that the measures may compromise commercial interests or national security.

### The connections between compliance, enforcement and verification

The concepts of compliance, enforcement and verification are deeply interconnected and form the foundation of international arms control, non-proliferation and disarmament. Compliance is the end goal, representing the extent to which states and other actors adhere to and implement the rules and obligations set forth in international treaties. Enforcement serves as a mechanism to compel compliance and deter non-compliance through various measures. Verification supports both compliance and enforcement by providing information and the means to monitor adherence.



Grüebelfabrik (CC BY-NC-SA)

### Distinction between the technical and political dimensions

The success or failure of verification, compliance and enforcement measures depend as much on political factors as on technical ones, despite the tendency to take political reality and power relations for granted.<sup>15</sup> The willingness of states to comply, the effectiveness of enforcement measures and the robustness of verification processes are all influenced by political realities within and between states. Enforcement of international mechanisms depends on the political alignment of and agreement between the relevant actors, which can be difficult to achieve. For example, the effectiveness of the UN Security Council (UNSC) as a political organ that recommends and adopts measures for peace and security depends on the political unity of its permanent members and the body can be rendered powerless in cases of disagreement due to the veto power. Similarly, verification measures are usually more effective when there is the political will to support transparency and cooperation.

1. Dunworth, Treasa. 2019. "Compliance and Enforcement in WMD-related Treaties", WMD Compliance & Enforcement Series, No. 1, UNIDIR, available at: [<https://unidir.org/files/2019-12/WMD%20CE%20-%20Paper%201%20v2.pdf>].
2. Simmons, Beth. 1998. "Compliance with International Agreements", in: Annual Review of Political Science 1: 75–93.
3. Simmons. "Compliance with International Agreements"
4. Chayes, Abram/Handler Chayes, Antonia. 1991. "Compliance without Enforcement: State Behavior under Regulatory Treaties", in: Negotiation Journal 7: 311–330, [<https://doi.org/10.1007/BF01000433>]
5. Short, Jodi L. 2021. "The Politics of Regulatory Enforcement and Compliance: Theorizing and Operationalizing Political Influences", in: Regulation & Governance 15: 653–85, [<https://doi.org/10.1111/rego.12291>].

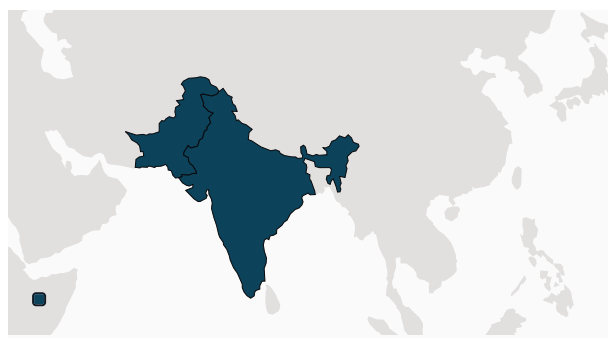
## 2. International norms, compliance and enforcement

When considering compliance and enforcement in the context of disarmament and non-proliferation obligations, it is useful to take a closer look at the nature of these obligations.



Grübelabrik (CC BY-NC-SA)

In many cases, they will be codified in international agreements as legal norms. States parties to such agreements are then bound by international treaty law to comply with these norms. However, international disarmament and non-proliferation norms can also exist beyond treaties. They can take the form of bi- or multilateral political understandings, general expectations of acceptable behaviour and international customary rules. One example for the first category is the Hague Code of Conduct Against Ballistic Missile Proliferation (HCOB), which is a politically binding 'set of general principles, modest commitments, and limited confidence building measures'. An example of norms serving as general expectations of appropriate behaviour can be seen, for instance, in the reactions to the nuclear tests India and Pakistan carried out in 1998.



Map showing India and Pakistan

Data: Natural Earth. Graphic: PRIF  
Licensed under CC BY 4.0.

In this case, neither state was a party to the NPT or the CTBT (which has not yet entered into force anyway), so technically the tests did not violate any treaty norms. Yet, there was widespread international condemnation of the tests, including by means of a unanimous UNSC resolution (1172 (1998)). Lastly, the prohibition of the use of chemical and biological weapons is considered a customary international rule, which means it is legally binding on all states and not only for the signatories of the respective treaties. These examples illustrate that compliance and enforcement also need to be considered beyond international treaties.

It should be noted that the relationship between compliance and international norms, whether codified in treaties or not, is complex. According to norm research in International Relations, violations of a norm can have negative effects on it, but they do not automatically weaken that norm or render it obsolete. Rather, the effect of norm violations on a norm depends on the context and specific circumstances of the violation and reactions to it, among other factors. Norms can in fact be robust even in the face of suspected or proven non-compliance.<sup>[1]</sup> For example, if a violator tries to deny or justify their actions, or shifts the blame to others, or if non-compliant behaviour is called out and condemned as unacceptable, this can actually reaffirm the validity of the norm. Likewise, if other states react to non-compliance, for example by applying compliance procedures as foreseen in a treaty, or by imposing sanctions on the norm violator, this can also reinforce the norm. However, if non-compliance is allowed to repeatedly occur with no consequences or reactions, this may over time contribute to the erosion of the norm. Reactions to non-compliance, both rhetorical and in practice, and enforcement of the norms in question, including disarmament and non-proliferation obligations, are hence crucial elements in any effort to maintain these norms.

1. See e.g. Deitelhoff, Nicole/Zimmermann, Lisbeth. 2019. "Norms under challenge: unpacking the dynamics of norm robustness", in: *Journal of Global Security Studies* 4 (1):2–17.



# 3. Institutions and tools relevant for compliance and enforcement

While disarmament and non-proliferation obligations can thus be derived from different kinds of international norms, there are a number of institutions and tools that are particularly relevant in the context of compliance with and enforcement of these obligations. This section will cover international treaties, national implementation measures, international organisations, ad hoc instruments and sanctions. It will also discuss the role of national and international courts in ensuring compliance with and enforcing arms control, non-proliferation and disarmament obligations.

## Treaties

Most arms control, non-proliferation and disarmament agreements take the form of international treaties (also see LU17). They often form the cornerstone of international regimes which may comprise additional elements. According to the classic definition, international regimes are structures for cooperation comprising 'sets of principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations'.<sup>[1]</sup> The treaties are usually concluded between states and contain legally binding rights and obligations. While they are tailored to specific weapons categories and may differ in scope and level of detail, most of the multilateral treaties in this field have some commonalities. The majority contain the obligation to implement the treaty provisions nationally, some envisage the establishment of international treaty organisations and some provide for measures to verify whether all member states comply with the treaty provisions. Several also contain provisions on how to deal with compliance concerns and violations, including in some cases a role for the UNSC.

## National implementation measures

States are the primary addressees bound by multilateral arms control treaties. However, they also need to ensure that individuals and legal entities under their jurisdiction do not act against the obligations contained in international agreements. Many multilateral arms control, non-proliferation and disarmament treaties therefore explicitly oblige states parties to adopt or adjust national legislation to ensure compliance with the treaty obligations.

The treaties that prohibit nuclear weapons, nuclear weapons tests, biological and chemical weapons, for instance, have similar provisions for the national implementation of these bans. They all require that states parties take the necessary measures to ensure that the activities prohibited by the respective treaty are translated into national legislation which can be applied to anyone and anywhere on the state's territory or under its jurisdiction. In some cases, the treaties themselves provide more detailed prescriptions on what these implementation measures should cover; in others, such as the Biological Weapons Convention (BWC), the treaty remains vague, but states parties have identified examples for specific implementation measures through decisions at review conferences. However, the status and breadth of national implementation measures is far from coherent and varies between the different treaty regimes, and between the states parties within those regimes.

While the main actors in the implementation of arms control, non-proliferation and disarmament treaties are states, other actors can play a supporting role. International treaty organisations often take on that function (see below). Moreover, research institutions and non-governmental organisations can also provide support to states, as for instance the United Nations Institute for Disarmament Research (UNIDIR), an autonomous institution within the UN system, and VERTIC, a non-governmental organisation based in London, are doing. The EU has adopted Joint Actions and Council Decisions in support of non-proliferation and disarmament treaties and has provided practical assistance for their national implementation.

## The United Nations and international treaty organisations

International organisations have always played an important role in the field of non-proliferation and disarmament, including in compliance and enforcement. The UN fulfils some unique functions in this area, and some treaties established their own specific international organisations. These organisations serve different functions, which usually include support in the implementation of the treaties as well as a role in monitoring compliance and dealing with compliance concerns or cases of non-compliance.



The UN Headquarter in New York City  
Kidfly182/Wikimedia, CC BY-SA 4.

### The United Nations

The UN consists of four main organs: the General Assembly, the Security Council, the International Court of Justice and the Secretariat, which includes the Office for Disarmament Affairs. The **General Assembly (UNGA)** operates in plenary sessions and through six committees, with the First Committee focusing on disarmament and international security. UNGA resolutions are not legally binding but provide recommendations for UN member states. The **UNSC**, in contrast, can issue binding resolutions and implement coercive measures such as sanctions or even military action in carrying out its mandate to maintain international peace and security. With regard to compliance with and enforcement of arms control treaties, the UNSC can, under Chapter VII of the UN Charter, adopt enforcement measures to proliferation cases, as seen with sanctions against North Korea or Iraq's disarmament in the 1990s. In addition, several treaties such as the BWC and Chemical Weapons Convention (CWC) provide for UNSC involvement in addressing compliance concerns. Thus, in principle, the UNSC assumes an important role for compliance and enforcement. In reality, however, its effectiveness has often been hampered by (geo)political conflicts

and the veto power of its five permanent members. The **UN Office for Disarmament Affairs (UNODA)** supports disarmament initiatives by promoting dialogue, transparency and confidence-building, and by supporting regional disarmament efforts, among other things. It also functions as the custodian of the UN Secretary-General's Mechanism for Investigation of Alleged Chemical and Biological Weapons Use (UNSGM) which can be activated by any UN member state if there is credible evidence that a biological or chemical weapons attack may have occurred (Jakob/Kloth/Mergler 2024).<sup>[2]</sup> Although the UNSGM is not a compliance or enforcement mechanism, its findings can inform political decisions related to compliance and enforcement in the field of chemical and biological weapons.

### Treaty organisations

In addition to the UN, some non-proliferation and disarmament treaties have established specialised organisations to support their implementation. For example, the Organisation for the Prohibition of Chemical Weapons (OPCW), the International Atomic Energy Agency (IAEA) and the Comprehensive Test-Ban Treaty Organization (CTBTO) fulfil this purpose in the chemical and nuclear fields. Treaty organisations provide forums for cooperation and consultation, facilitate communication between their members, and provide assistance and support in many areas related to treaty implementation. The latter often includes advice to ensure appropriate national implementation. Treaty organisations usually also play a role in maintaining compliance with the treaties, as they provide instruments to monitor and verify compliance, technical advice and forums in which compliance procedures can be carried out as foreseen in the treaties. While determining non-compliance and taking decisions about enforcement measures are ultimately political processes carried out by states, either individually or collectively, and not by the technical divisions of the organisation, these processes can be founded on the organisation's scientific and technical findings.

The BWC has not established an international organisation like the OPCW or CTBTO. However, at the Sixth BWC Review Conference in 2006, an Implementation Support Unit (ISU) was created to provide administrative support to states parties and to the meetings agreed by the Review Conferences. In this function, the ISU provides assistance regarding the implementation of the BWC, its universalisation and facilitates the exchange of the Confidence-Building Measures. The ISU was set up within UNODA and currently has five core staff members. Its mandate needs to be renewed regularly, and this was last done at the Ninth Review Conference in 2022 for the period from 2023 to 2027.

The CWC established the Organization for the Prohibition of Chemical Weapons (OPCW) as its treaty organisation. All CWC states parties are also members of the OPCW. The OPCW consists of three bodies: The Conference of the States Parties (CSP) and the Executive Council (EC), which are the two policy-making organs, and the Technical Secretariat (TS). With regard to compliance, the TS is responsible for carrying out the verification measures and investigations as foreseen by the CWC. The 41 members of the EC consider questions relating to the implementation of the CWC and to compliance/non-compliance and may bring matters to the attention of the CSP, or in cases of particular gravity and urgency, directly to the attention of the UNGA and the UNSC. The CSP is the primary body responsible for reviewing compliance with the CWC. In the event of suspected or proven non-compliance, it may decide on measures aimed at redressing the situation and restoring compliance, and it may also bring the issue to the attention of the UNGA and the UNSC.

Neither the Non-Proliferation Treaty (NPT) nor the Treaty on the Prohibition of Nuclear Weapons (TPNW) established their own treaty bodies. However, the International Atomic Energy Agency (IAEA), an independent international organisation established in 1956, assumes some of the functions for the NPT that would normally be fulfilled by such a treaty body. The IAEA comprises two policy-making bodies, the General Conference and the Board of Governors representing 35 states, as well as several offices and departments, including the Department of Safeguards which carries out the verification activities.



Safeguards Comprehensive Training Exercise at Dukovany Nuclear Power Plant in the Czech Republic on 11 June 2015  
D. Calma/IAEA; CC BY-NC-ND 2.0

The TPNW does not refer explicitly to the IAEA. Under the NPT, however, all states parties that are classified as non-nuclear weapons states by the treaty are obligated to conclude safeguards agreements with the IAEA to enhance compliance with the treaty. Under these safeguards agreements, the IAEA conducts verification measures to ensure that nuclear materials and facilities are used for peaceful purposes only. Inspectors from the IAEA are tasked, among other things, with verifying and assessing member states' compliance with the IAEA Statute and other pertinent agreements between states and the Agency, and to report any non-compliance to the IAEA's Director-General. The Director-General informs the Board of Governors, which then reports the case to the member states, the UNGA and the UNSC. The Board may also take different enforcement measures, such as suspension of assistance or of membership rights, to restore compliance. Moreover, member states may involve the International Court of Justice (ICJ) to settle disputes concerning the interpretation or application of the IAEA Statute or to seek advisory opinions on legal questions regarding IAEA activities (see below).

Had the CTBT entered into force, it would have established the Comprehensive Test-Ban Treaty Organization. Even though the specific requirements for the entry into force have not yet been met, the signatories to the CTBT decided in 1996 to establish an interim organisation: The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) which carries out the functions that would support monitoring compliance with the CTBT, such as operating an extensive network of seismic and other monitoring stations able to detect nuclear (test) explosions. In the event of a violation being detected, any follow-up action would fall to the UNSC or the international community as long as the CTBT has not entered into force.



Headquarters of the OPCW in The Hague  
OPCW, CC BY-NC-ND 2.0

### Ad hoc institutions established to address compliance problems

In some instances, ad hoc institutions were established in response to specific compliance-related events. Examples include the commissions set up by the UNSC in relation to Iraq's weapons of mass destruction programmes, as well as the mechanisms established by the UN and the OPCW in response to Syria's use of chemical weapons and violations of the CWC, and the Joint Comprehensive Programme of Action (JCPOA) created to deal with concerns about Iran's compliance with its NPT obligations.

### Disarmament of Iraq's nuclear, chemical and biological weapons

Iraq had maintained offensive nuclear, chemical and biological weapons programmes since the 1970s, which were all detected and dismantled in the wake of Iraq's invasion of Kuwait in 1990 and the subsequent Second Gulf War. Iraq had ratified the NPT in 1969, so its nuclear activities violated the provisions of the treaty. It was a signatory to the BWC, which would have required it to act in the spirit of that treaty, but only became a full member in 1991. The CWC was not

concluded until 1992, and Iraq acceded to it in 2009. It has since declared and destroyed the remnants of its chemical weapons programme under OPCW verification. As part of the ceasefire agreement after the war in 1991, the UNSC decided that these weapons programmes would be terminated and dismantled under international supervision. For the nuclear weapons programme, the IAEA took on that task. Since there were no organisations covering chemical or biological weapons at the time, the UNSC set up the **UN Special Commission (UNSCOM)** composed of national experts and equipped with a mandate to monitor the destruction of all of Iraq's biological and chemical weapons stockpiles and related facilities. In 1999, the UNSC set up the **United Nations Monitoring, Verification and Inspection Commission (UNMOVIC)**. This latter organisation replaced UNSCOM and continued its mandate to destroy and dismantle all of Iraq's chemical and biological weapons, as well as storage and production facilities by 2007. Unlike UNSCOM, UNMOVIC inspectors performed their duties as UN personnel and not in their national capacities. In the course of their work, both commissions succeeded in uncovering hitherto unknown information that contributed to eliminating Iraq's nuclear, biological and chemical weapons programmes.

### Chemical weapons disarmament in Syria

Between 2012 and 2018, numerous chemical weapons attacks were carried out in Syria. When the first reports of chemical attacks came out of Syria in 2012 and 2013, Syria was not yet a member of the CWC, and the OPCW thus had no authority to address these allegations. Instead, the UNSGM was activated and confirmed four chemical weapons attacks, including the particularly severe attack on Ghouta in August 2013, without, however, attributing responsibility. In the wake of this latter attack and under political pressure from Russia and the USA, Syria acceded to the CWC and was thus subject to its disarmament and verification obligations. To carry out the highly demanding task of dismantling the Syrian chemical weapons programme as quickly as possible in the midst of civil war, the OPCW and the UN established a Joint Mission in 2013. Under its supervision, all chemical weapons stockpiles and production facilities declared by Syria to the OPCW were destroyed or converted to peaceful purposes by 2016. However, from 2014 onwards concerns arose that Syria might not be fully complying with its obligations under the CWC. In response, several other ad hoc instruments were established within the OPCW Technical Secretariat and by the UNSC. **The Declaration Assessment Team (DAT)** has been addressing gaps and inconsistencies identified by OPCW inspectors in Syria's chemical weapons-related declarations since 2014, and until the end of 2024, it reported that the declarations were still incomplete and inaccurate. The **Fact-Finding Mission (FFM)**, also established in 2014,



follows up on allegations of chemical weapons attacks to determine whether chemical weapons were indeed used. It has so far investigated 74 alleged attacks and confirmed 20. Between 2015 and 2017, the **OPCW-UN Joint Investigative Mechanism (JIM)** was mandated by the UNSC to identify the perpetrators of chemical weapons attacks in Syria, which it did in six of the eleven cases it investigated (four attacks were attributed to the Syrian government at the time and two to the so-called Islamic State). After the JIM's mandate expired in 2017 due to a Russian veto in the UNSC, the **Investigation and Identification Team (IIT)** was set up in 2018 as part of the OPCW TS following a majority decision of OPCW member states. Similar to the JIM, the IIT is tasked with identifying those responsible for confirmed chemical weapons attacks in Syria. As of February 2025, it had named the Syrian government as the perpetrator in five cases and the so-called Islamic State in one.<sup>[3]</sup> In response to these proven violations of the CWC, states parties have, by majority decision, invoked the compliance procedures of the treaty, suspending several of Syria's membership rights, recommending restrictions on the trade of listed chemicals with Syria, and bringing the matter to the attention of the UNSC and UNGA. It is as yet unclear whether and how Syria's CW policy will change after the fall of Assad and his government in 2024.

#### The Syrian case

**2012–2013 • First chemical attacks are reported in Syria. The UN confirms four, including the major Ghouta attack in August 2013, but doesn't attribute responsibility.**

**2013 • Under pressure from the US and Russia, Syria joins the CWC and declares its chemical weapons programme to the OPCW. The OPCW-UN Joint Mission is created to dismantle Syria's chemical weapons program.**

**2014 • Doubts emerge over Syria's compliance with the CWC. The OPCW sets up the Declaration Assessment Team (DAT) to review inconsistencies in the declaration, and the Fact-Finding Mission (FFM) to investigate alleged attacks. The FFM has confirmed 20 out of 74 allegations investigated as of March 2025.**

**2015–2017 • The OPCW-UN Joint Investigative Mechanism (JIM), established by the UN Security Council, identifies perpetrators for chemical weapons attacks, attributing four attacks to the Syrian government and two to ISIL. Russia blocks renewal of the JIM's mandate in 2017.**

**2016 • The elimination of Syria's declared chemical weapons stockpiles and production sites is completed under OPCW verification.**

**2018 • Following a decision by CWC states parties, the OPCW creates the Investigation and Identification Team (IIT) to identify those responsible for confirmed chemical weapons attacks. As of March 2025, the IIT has identified the Syrian government as perpetrator in five attacks and ISIL in one.**

**2020 and 2023 • OPCW members suspend some of Syria's membership rights and take additional measures in response to its non-compliance with the CWC.**

**2024 • The DAT once more reports that Syria's declarations remain incomplete. Assad's fall raises questions about the safety, security and future of Syria's chemical weapons stockpiles and facilities.**

**2025 • The interim government of Syria publicly announces its intention to eliminate the remains of the chemical weapons programme, cooperate with the OPCW and restore Syria's compliance with the CWC.**

#### Iran's nuclear programme and the Joint Comprehensive Programme of Action (JCPOA)

The JCPOA is an agreement that was concluded in 2015 between China, France, Germany, Iran, Russia, the United Kingdom and the United States.



Announcing the JCPOA on April 2, 2015  
State Department photo/Public Domain

The agreement was a response to years of Iranian nuclear activities and concerns raised about whether these activities were entirely peaceful, as Iran claimed, or whether they were part of an illegal nuclear weapons programme in violation of Iran's obligations under the NPT.



IR-40 heavy water reactor in Arak, Iran  
Nanking2012/Wikimedia; cropped, CC BY-SA 3.0

Due to these compliance concerns, the United States and the EU had imposed sanctions on Iran. These were to be incrementally lifted under the JCPOA in return for Iran rolling back specific parts of its nuclear programme under IAEA verification in compliance with its JCPOA obligations. The agreement was also approved by the UNSC in Resolution 2231 (2015). However, implementation proved difficult. The Western parties to the agreement suspected Iran of violating its obligations, and in 2018, the United States withdrew from the JCPOA. All Western parties to the JCPOA kept sanctions in place in reaction to their concerns about Iran's non-compliance with the JCPOA, which were supported by the results of the IAEA's verification activities. In 2019, Iran openly resumed nuclear activities that are proscribed under the JCPOA, and since 2021 has ceased all collaboration with the IAEA meaning that the Agency can no longer carry out its verification activities as foreseen in the JCPOA. The IAEA Board of Governors has repeatedly issued resolutions by majority vote censuring Iran for not fulfilling its JCPOA obligations and not cooperating with the IAEA. In its coordinating role, the EU has attempted to facilitate negotiations that would allow the revival of the agreement, but as of 2024, this has been to no avail – the JCPOA still lies dormant.

### Enforcement tools

Given the nature of the international system with its lack of an overarching authority, enforcement of non-proliferation and disarmament norms is complicated. Generally speaking, the use of (military) force against another state is prohibited according to Article 2, para 4 of the UN Charter and customary law. But the UNSC has the authority to authorise the use of force against another state if it determines the existence of a threat to or breach of the peace, or act of aggression within the meaning of Article 39 of the UN Charter. In the past, the UNSC declared the proliferation of weapons of mass destruction a threat to international peace and security. However, the adoption of a UNSC resolution authorising the use of force in case of biological, chemical or nuclear weapons use is highly unlikely given the current geopolitical climate and the veto power of its five permanent members (P5). Another exception to the use of force is self-defence. In the context of self-defence, military force was applied in 2003, for example, when the US and the United

Kingdom (UK) launched a military intervention in Iraq over their allegations that the latter continued to possess weapons of mass destruction and that an armed attack with these weapons, above all on the US, would be very likely. Self-defence requires either that an armed attack has already taken place or is imminent. Neither of these requirements were fulfilled in the case of Iraq, which is why the US and UK military intervention in Iraq and the ousting of Saddam Hussein was considered illegal.<sup>[4]</sup> The US and France – neither with the authorisation of the UNSC or on the basis of self-defence – carried out limited airstrikes against Syria in response to a chemical weapons attack in 2017, with the stated goal of reducing the risk of further similar attacks. Whether these attacks were legally justified remains highly contested. Some argued that the attacks were part of a humanitarian intervention (a third exception to the use of force). But the concept and legality of a humanitarian intervention as an official exception to the use of force remains highly contested.<sup>[5]</sup>

Another, more frequently applied instrument available to states in this context is sanctions. Sanctions are enforcement tools aimed at eliciting or restoring compliant behaviour from actors in line with specific norms or agreements, often by raising the cost of unwanted actions.<sup>[6]</sup> The term 'sanctions' generally refers to economic sanctions, but it might also include travel bans on individuals, visa restrictions, limited diplomatic engagement or restricted participation in cultural events. Sanctions can be applied unilaterally by individual states, by groups of states, or collectively with a UNSC mandate under UN Charter Chapter VII. In the latter case, all UN members are obliged to implement these sanctions.

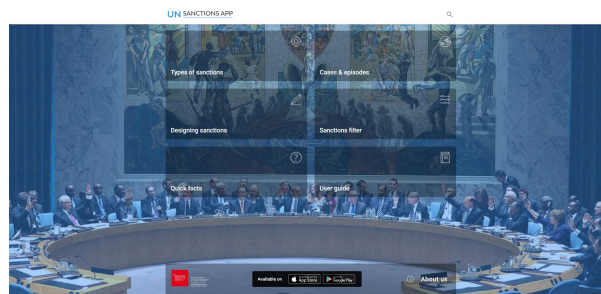
The most common way of classifying sanctions is based on their scope, distinguishing between comprehensive sanctions and targeted or 'smart' sanctions. Comprehensive sanctions are characterised by wide-ranging restrictions on trade, finance and other interactions, designed to isolate the state and put maximum pressure on its government. Comprehensive UN sanctions were, for example, enacted against Iraq following its invasion of Kuwait in 1990. These sanctions led to a humanitarian catastrophe in Iraq, which prompted a re-evaluation of their scope. The concept of 'smart' or targeted sanctions was developed to focus on individuals, entities or sectors with the aim of minimising the impact on the general population and allowing for more flexibility in a changing context. Examples of targeted sanctions include travel bans, individual or entity asset freezes, sanctioning industries or sectors crucial for a state's economy or limiting diplomatic relations. Since 2000, targeted sanctions have been implemented not only by the UN but also by several individual states and regional organisations, which developed national sanctions programmes. These have included the African Union, Australia, Canada, the EU,

Japan, Norway, Switzerland, the United Kingdom and the US.

The impact of any sanctions should be constantly monitored to ensure they are having the desired effect and to account for changing circumstances. For example, sanctions might need to be broadened to address a web of proxies and alternative supply chains used to evade an import ban. Sanctions are a complex trade-off between the restrictions needed to compel a change in behaviour and political and ethical acceptability.

Sanctions mandated by the UNSC related to non-compliance with non-proliferation and disarmament norms are currently in place against North Korea (over its nuclear weapons programme and tests). Examples of sanctions related to arms control and disarmament imposed by individual states and the EU include those against Syria (over its chemical weapons possession and use), Iran (over its suspected nuclear programme) and Russia (over its suspected use of chemical weapons agents in assassinations and on the battlefield in Ukraine).

### Introducing the UN Sanctions App



Screenshot of the UN Sanctions App, created in 2013 at the Geneva Graduate Institute, includes all the UN sanctions that have been imposed since 1991 and identifies 76 types of sanctions [Website] (<https://unsanctionsapp.com/>)

Courtesy of Thomas Biersteker, Zuzana Hudáková and Marcos Tourinho, Global Governance Centre, Geneva

1. Krasner, Stephen D. (ed.) 1983. *International Regimes*. Cornell University Press, 2.
2. Jakob, Una/Kloth, Stefan/Mergler, Ines. 2024. "Investigating Alleged Biological Weapons Use – Strengthening the UN Secretary General's Mechanism", PRIF Report 7/2024, DOI: 10.48809/prifrep0724
3. All reports by the IIT are available at [<https://www.opcw.org/iit>].
4. Heintschel von Heinegg, Wolff. 2025. "Iraq, Invasion of 2003", in: Max Planck Encyclopedia of Public International Law. Oxford University Press, available at: [<https://opil.ouplaw.com/display/10.1093/law:epil/9780199231690/law-9780199231690-e1820>]. [<https://opil.ouplaw.com/display/10.1093/law:epil/9780199231690/law-9780199231690-e1820>]
5. Scharf, Michael P. 2019. "Responding to Chemical Weapons Use in Syria", in: *Case Western Reserve Journal of International Law* 51 (1): 189–199.
6. van Bergeijk, Peter/Biersteker, T. 2015. "How and When Do Sanctions Work? The Evidence" in: *On Target? EU Sanctions as Security Policy Tools*, January, [<https://doi.org/10.2815/710375>]



## 4. The role of national and international courts in compliance and enforcement

Under certain circumstances, national and international courts also play a role in enforcing non-proliferation and disarmament treaties, such as those related to biological, chemical and nuclear weapons. In international law, the principle of sovereign equality of all states applies, which means that no state may sit in judgment over another state. What states are allowed to do, however, is to hold individuals accountable and prosecute them and, in certain instances, turn to the International Court of Justice to settle disputes with other states. However, there are limitations to the possibility of enforcement especially at the international level.

### National courts

The production, possession and use of nuclear, chemical and biological weapons is a criminal offence in many countries. National courts can thus hold individuals involved in such activities criminally liable. This applies if the offence is committed on the country's own territory (= territoriality principle), or in another country but the offender or the victim is a national of the state that initiated criminal proceedings (= active and passive personality principle, respectively). Lastly, some states have adopted legislation providing their national courts with universal jurisdiction, which applies irrespective of the location of the crime or the nationality of the perpetrator or victim, provided that the crime in question is particularly abhorrent, such as war crimes, including the use of biological or chemical weapons, or crimes against humanity (principle of universality). Generally, because of the principle of immunity, national courts cannot hold state bodies of a foreign state liable for their role in such crimes if they acted in their official capacity. However, with regard to the most serious crimes, interpretation of the rules of immunity of state bodies under international law has varied between various national courts.

One example is the case of the French magistrate who, on 14 November 2023, issued an arrest warrant for Syria's President, Bashar al-Assad. According to the court, there was sufficient evidence to initiate proceedings against President al-Assad for his key role in numerous chemical weapons attacks. However, there was a legal dispute about the question of al-Assad's immunity as then sitting head of state, which may now move in a new direction since al-Assad's fall from power in December 2024. Proceedings were still in progress as of December 2024.

### International courts

The International Criminal Court (ICC) could also play a role in punishing individual offences related to crimes such as genocide, crimes against humanity, war crimes and the crime of aggression (see Article 5 et seq. of the Rome Statute).



The ICC Headquarter in The Hague (2018)  
Justiflix/Wikimedia; CC BY-SA 4.0

The ICC has jurisdiction if such a crime has been committed on the territory of a state party (principle of territoriality), or if it has been committed outside such territory but the perpetrator is a citizen of a state party (principle of active personality). Moreover, the ICC can exercise jurisdiction if the UNSC has referred a situation to the Court. In this case, the concept of universal jurisdiction applies. As for the enforcement of ICC rulings, states are obliged to extradite to the Court a person who it has indicted. In contrast to national courts, the ICC does not differentiate between crimes committed by a state body in their official or private capacity or by a private person.

Essentially, all the crimes listed above can be committed with biological and chemical weapons, for example if they are used in an armed conflict to deliberately kill civilians. However, although the Rome Statute uses the same language as the 1925 Geneva Protocol regarding the use of asphyxiating gases and poisonous weapons, among other things, it is not clear whether the Statute originally directly applied to the use of biological or chemical weapons. In 2017, the use of biological weapons was explicitly designated a war crime under the jurisdiction of the ICC in both international and non-international armed conflicts.

However, the pertinent amendment to the Rome Statute has only entered into force for those 23 states that had ratified it as of December 2024. The ICC has not yet passed a judgment dealing with biological, chemical or nuclear weapons.

Theoretically, it is also possible for proceedings to be initiated before the **International Court of Justice (ICJ)**.<sup>[1]</sup> Unlike the ICC, the ICJ is responsible for legal disputes between states. However, it can only exercise its jurisdiction under very specific conditions, most of which presuppose states actively and explicitly accepting the ICJ's jurisdiction either generically, based on international treaties or for specific cases. As for enforcement, the decisions of the ICJ are generally non-executable. Because states are sovereign and only voluntarily agree to the ICJ's jurisdiction, they cannot ultimately be forced to abide by its rulings. The only option is for other states or the ICJ itself to increase the political pressure on these states or try to persuade them to comply with international law by means of sanctions.

Despite these limitations, the ICJ has acted several times in relation to non-proliferation and disarmament treaties. In 1994, the UNGA requested that the ICJ issue an **advisory opinion** on the question of whether the threat or use of nuclear weapons is under any circumstances permitted under international law. The Court's opinion, issued in 1996, did not definitively conclude whether the use of nuclear weapons would be illegal in extreme situations of self-defence, but it

held that the use of nuclear weapons would most likely contradict core principles of humanitarian law. In 2014, the Republic of the **Marshall Islands** filed an application with the ICJ, claiming that the United Kingdom had breached treaty and customary international law obligations concerning negotiations relating to nuclear disarmament. While the ICJ did not assume jurisdiction in the case, it reiterated that Article VI of the NPT comprises a specific obligation for states parties, including the nuclear weapons states, to actively pursue nuclear disarmament. Neither action is a classic example of enforcement. However, the political impact of the ICJ's statements in both cases can be seen as strengthening the normative basis of nuclear disarmament and incentivising states to abide by their treaty obligations. In another example, in June 2023, **Canada and the Netherlands** initiated ICJ proceedings against the Syrian Arab Republic under the UN Convention against Torture, claiming that Syria had violated numerous provisions of international law during its civil war, including through the use of torture and other types of cruel, inhuman or degrading treatment or punishment and the use of chemical weapons.<sup>[2]</sup> As of December 2024, the case was still pending.

1. See also Dunworth, Treasa, note 1.

2. Hoffberger-Pippan, Elisabeth/de Vries, Barry. 2023. Chemical Attacks under the Convention against Torture: A New Possible Avenue? PRIF Blog, 21 August, available at: <https://blog.prif.org/2023/08/21/chemical-attacks-under-the-convention-against-torture-a-new-possible-avenue/>

# 5. The role of the EU in compliance with and enforcement of non-proliferation and disarmament agreements

The EU itself is not a party to arms control agreements, but it has been committed to the disarmament and non-proliferation of biological, chemical and nuclear weapons for many years.



EU flag  
Håkan Dahlström/Wikimedia, CC BY 2.0

In as early as 2003, the EU adopted the EU Strategy against Proliferation of Weapons of Mass Destruction, and it has since provided technical, diplomatic and financial support to the pertinent regimes, including in areas relevant to compliance.

	
<b>COUNCIL OF THE EUROPEAN UNION</b>	Brussels, 10 December 2003  15708/03  LIMITE  PESC 768 CODUN 50 CONOP 64 COARM 21
<div style="border: 1px solid black; padding: 5px; transform: rotate(-15deg); opacity: 0.5; font-weight: bold; font-size: 2em;">PUBLIC</div>	
<b>NOTE</b> from : the Council to : the European Council Prev.doc.no: 15656/03 Subject : Fight against the proliferation of weapons of mass destruction - EU strategy against proliferation of Weapons of Mass Destruction	
Delegations will find attached the text of the EU Strategy against proliferation of Weapons of Mass Destruction as endorsed by the Council on 9 December 2003 with a view to adoption by the European Council.	

[EU Strategy against the Proliferation of WMD (2003)]  
(<https://data.consilium.europa.eu/doc/document/ST-15708-2003-INIT/en/pdf>)

For instance, the EU has stated its support for strengthening the Confidence-Building Measures (CBMs), for other transparency measures and for the addition of verification measures to the BWC. In the field of chemical weapons, the EU has not only expressed its strong condemnation of chemical weapons attacks and its support for the compliance measures directed against Syria, but it has also enacted its own sanctions against Syrian individuals and entities assumed to be connected with the Syrian chemical weapons programme under the Assad government. The measures included 'asset freezes and travel bans of persons and/or entities directly responsible for the development and use of chemical weapons as well as those who provide financial, technical or material support, and those who assist, encourage or are associated with them' (EU website). Similarly, the EU played a significant role in connection with the Joint Comprehensive Plan of Action (JCPOA): It imposed a comprehensive package of sanctions against Iran, which has had a massive impact on the Iranian economy. After the JCPOA was negotiated, concluded and approved by the UNSC in Resolution 2231 (2015), as part of the implementation of this resolution the EU also adopted legislative acts or decisions that included a (partial) lifting of sanctions against Iran. Moreover, the High Representative of the EU acts as a coordinator in the negotiations related to the JCPOA.



Announcing the JCPOA on April 2, 2015  
State Department photo/Public Domain

## 6. Reflections and outlook

---

Compliance with international disarmament and non-proliferation treaties is key to their success and a crucial element of international security. Depending on the time when the treaties were concluded and the particularities of the respective weapons, states have chosen different ways of dealing with compliance – from the minimal compliance procedures with no verification whatsoever in the 1972 Biological Weapons Convention to the elaborate compliance and verification system of the 1992 Chemical Weapons Convention. For all treaties, cases of suspected or proven non-compliance have been rare. Yet, those few cases of serious and intentional treaty violations that did occur have posed, and are still posing, significant challenges for the treaty regimes and for international security in general. These cases have also exposed one basic problem of disarmament and non-proliferation agreements: the difficulty of enforcement. The existing treaties are usually based on the assumption of a shared interest of all states parties to ensure and maintain compliance in case of violations. And in the absence of an overarching enforcement authority in the current international order, the power to enforce international rules rests with the UNSC. The availability, strength and effectiveness of enforcement measures in any given case is thus to a large extent contingent on the unity of the international community, including the five permanent members with their veto powers.

Likewise, the processes to determine (non-)compliance are complex and multifaceted, and they depend on technological as well as political factors. Scientific and technological developments can present challenges if they increase proliferation risks

and complicate verification of compliance. However, they can also provide additional opportunities, for example by improving detection methods or facilitating verification of compliance in other ways. Processes to determine (non-)compliance will usually be based on scientific and technological assessments, so it is important that there are sound measures in place and that relevant scientific and technological developments are taken into consideration as much as possible. However, compliance assessments, as well as decisions to establish new or implement existing compliance and enforcement measures, are ultimately political decisions that take place in political, often polarised, settings. One example is the discussions about verification in the BWC. This topic is back on the official BWC agenda after a 20-year hiatus, but political disputes and geopolitical tensions are severely inhibiting the chances of success. The case of Iran's nuclear programme is another case in point. Moreover, disinformation and attempts to undermine trust in technological assessments may complicate compliance discussions, as has been the case for several years when it comes to the OPCW's ability to deal with chemical weapons use. Especially in the current challenging international security climate, in which the chances of pursuing cooperative approaches to disarmament and non-proliferation seem to be constantly on the decline, it will be important to preserve, enhance and apply the measures that are already in place, and to continuously explore new ways of ensuring and enhancing compliance with and enforcement of non-proliferation and disarmament obligations.