

# UNDERSTANDING DISINFORMATION IN UKRAINE

## DIRTY BOMBS AND NUCLEAR ESCALATION THREATS

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### KEY POINTS

**Disinformation narrative:** Moscow's false claim that Ukraine was planning to detonate a dirty bomb on its own territory and blame Russia gained mainstream media attention following its full-scale invasion of Ukraine. This rhetoric began generating substantial alarm several months later in October 2022, when Western officials (Europe, the US and allied countries) believed it might serve as cover for a false-flag operation or pretext for tactical nuclear weapons use.

**Response:** The initial response from Ukraine and its allies to Russia's dirty bomb narrative relied primarily on fact-checking to refute and debunk claims about dirty bomb manufacturing in Ukraine. After it became apparent that these claims could be used as a pretext to escalation, backchannel diplomacy and threats of retaliation were also employed to dissuade Russian escalatory action.

**Implications:** Moscow's dirty bomb narrative underscores how false narratives can manipulate public opinion and obscure intentions. Moving forward, combating such disinformation, especially in fast-evolving crises, may need to rely more heavily on advanced technologies like AI-driven analytics and real-time verification to rapidly counter false narratives.

### WHAT IS A DIRTY BOMB?

**A dirty bomb (i.e. radiological dispersal device) uses conventional explosives to spread radioactive material - causing contamination, damage and possibly significant disruption.**

Unlike nuclear weapons, which require highly enriched uranium or weapons-grade plutonium, the materials used in dirty bombs do not need to be specially developed for weapons use and could potentially be gathered from research, industrial, energy and medical sources. Their relatively small size allows these devices to be positioned by foot or transported by vehicle, making them more accessible to malign non-state actors.<sup>1</sup> Dirty bombs have never been successfully used,<sup>2</sup> however:

- Their detonation would be millions of times less powerful than a nuclear weapon explosion as it does not create a nuclear fission chain reaction.<sup>3</sup>
- The area contaminated would be dependent on the explosive yield and amount of radioactive material released – but would likely extend only a few hundred metres.
- Radiation released would likely be insufficient to immediately cause mass fatalities, but victims could be harmed over time by the exposure to radioactive material.

The psychological effects of the detonation and subsequent decontamination efforts have led these devices to be characterised as “weapons of mass *disruption*” rather than “weapons of mass *destruction* (WMDs).”<sup>4</sup>

### DISINFO.

Since at least 2015, Russian actors have propagated the dirty bomb narrative to advance domestic and geopolitical interests - as part of its broader disinformation campaigns. Moscow employs a variety of tactics when spreading these narratives, such as amplifying existing societal divisions and disseminating multiple narratives concurrently to cultivate confusion and public apathy.<sup>5</sup> These operations span all chemical, biological, radiological and nuclear (CBRN) domains and have found greater success in the Global South compared with Western audiences.<sup>6</sup>

### TIMELINE<sup>7</sup>

- 2015 - 2021  
Sporadic appearance of dirty bomb narrative in Russian language media/social media.
- January - March 2022  
Russian state media reports on alleged Ukrainian dirty bomb manufacturing, possibly to help justify its invasion.
- 23 October 2022  
Surge in Russian state media reporting about a potential dirty bomb 'provocation'.  
Russian defence officials discuss concerns with French, UK and US counterparts.
- 24 October 2022  
France, UK and US leaders reject Russia's dirty bomb narrative.
- US officials express fears that Russia's claims may be used as a pretext for tactical nuclear weapons use in Ukraine.
- Chief of the Russian Armed Forces claims a dirty bomb is nearly complete and that the military is preparing to operate in a radioactive environment.

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### OBJECTIVES

Russia's dirty bomb narrative (*see timeline*) peaked sharply in intensity and outreach in October 2022, causing Western officials to become concerned that the sudden increase in messaging might serve as cover for a false-flag operation or pretext for tactical nuclear weapons use.<sup>8</sup>

At the time, Moscow was experiencing significant battlefield setbacks and Western intelligence agencies had intercepted communications from senior Russian military leaders discussing the circumstances in which Moscow might use tactical nuclear weapons against Ukraine.<sup>9</sup> Considering these broader developments, Moscow was plausibly attempting to achieve one, or a combination, of the following objectives:

- Prepare the information space for potential nuclear weapons use.
- Influence the behaviour of Ukraine and its Western allies.
- Express genuine concern about Ukraine's intentions, due to inaccurate intelligence gathering.
- Bolster domestic support for its ongoing mobilisation efforts.

### RESPONSE

As Russia's dirty bomb narrative and resulting public concern peaked, the West implemented several tactics to mitigate Moscow's information operations.

- **Fact-checking:** Officials, media platforms and research institutes<sup>10</sup> redoubled ongoing efforts to debunk Moscow's dirty bomb narrative, with strategies such as reverse image searching and feasibility analysis by experts. The International Atomic Energy Agency, which undertook verification activities and conducted research within Ukraine, also categorically rejecting Moscow's claims.<sup>11</sup>
- **Backchannel diplomacy:** This was conducted to encourage Russia's partners to dissuade Moscow from employing a dirty bomb or nuclear weapon. China's leader, Xi Jinping, likely warned President Putin against using nuclear weapons. India also issued a public statement condemning nuclear weapon use by any state.<sup>12</sup>
- **Threats of retaliation:** These were privately conveyed to Russia by French, UK and US officials. Western leaders reportedly warned that a tactical nuclear weapons strike would not go unpunished and that they may respond by conventionally striking Russian forces.<sup>13</sup>

### CONCLUSION

Moscow's dirty bomb narrative highlights how false or misleading information can be used to exploit global radiological and nuclear fears, shape public opinion, obscure intentions and sow confusion.<sup>14</sup> Western debunking efforts likely played a role in calming public anxiety and challenging Russia's accusations. However, combating future disinformation, especially during rapidly evolving crises, may need to increasingly leverage advanced technologies such as AI-driven analytics and real-time data verification to identify and counter misleading narratives before they gain momentum.

- Russia's UN ambassador writes to the UN Secretary General stating his concerns about dirty bomb use.
- **25 October 2022**  
President Biden warns that tactical nuclear weapons use would be a "serious mistake".
- **26 October 2022**  
Russia's defence minister contacts Chinese and Indian counterparts to warn them of the dirty bomb threat.
- NATO's secretary general warns of severe consequences in response to nuclear weapons use.
- India's defence minister publicly warns against nuclear weapons use.
- **27 October 2022**  
President Putin repeats dirty bomb allegations.
- The US defence secretary warns of significant retaliation if Russia uses nuclear weapons.
- **28 October 2022**  
Moscow's dirty bomb warnings abruptly end.
- **November 2022 - Present**  
Circulation of dirty bomb narrative returns to baseline frequency.



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