



## **FIT TO DEFEND:**

ANALYSIS OF STANDARD COMBAT KIT PROVISION FOR  
SERVICEWOMEN IN THE ARMED FORCES OF UKRAINE

# INTRODUCTION

One of the most significant challenges in integrating women into the Armed Forces of Ukraine (AFU) has been providing servicewomen with appropriate military uniforms, footwear, and personal protective equipment. Following Russia's full-scale invasion, this issue became substantially more pressing as the number of women in the military increased dramatically: by 40%<sup>1</sup> in the first two years of the war. As of January 2024, the AFU comprised 66,900 women, including 47,200 servicewomen<sup>2</sup>. Of these, 6,500 held leadership positions, while over 5,000 were deployed on the front line<sup>3</sup>.

Historically, the AFU supply system has been predominantly oriented towards men. Consequently, the majority of military equipment items and their technical specifications were designed for male personnel. Previously approved women's uniforms by the Ministry of Defence (MoD) were intended exclusively for daily, non-combat tasks. For instance, only skirts were provided for parade and everyday uniforms, with no option for trousers<sup>4</sup>, and high-heeled shoes remained mandatory for parade uniforms as recently as 2021, sparking significant public criticism<sup>5</sup>.

Women have faced systemic barriers to joining the Armed Forces. It wasn't until 2016 that the AFU expanded the list of military specialties available to women, allowing them to serve as riflemen, snipers, machine gunners, grenade launchers, and reconnaissance operators. Two years later, the Verkhovna Rada (Ukrainian Parliament) passed legislation granting women the right to hold any combat position in the military on equal terms with men<sup>6</sup>. This decision marked a crucial step towards expanding women's opportunities in the Ukrainian army. The law came into effect at a time when women were already actively participating in combat operations during the Anti-Terrorist Operation/Joint Forces Operation in Donetsk and Luhansk regions, often serving as volunteers or in roles that weren't officially recognised.

Following Russia's full-scale invasion in 2022, both women and men were issued the same Unified Combat Kit (SCK), which was designed for men and did not account for the anatomical features of female physiology. Despite the wide size range in the technical specifications for clothing items, women were forced to either purchase uniforms at their own expense, seek assistance from volunteers, or have the uniforms they received from the MoD altered<sup>7</sup>. A similar situation persisted with summer and winter footwear provision. Moreover, the one-size-fits-all body armour, weighing from 10.5 kg, fails to accommodate female chest anatomy. Consequently, its significant weight and improper fit create additional physical strain, substantially limiting women's mobility and endurance during extended operations, whilst also causing health issues.

In November 2022, a petition<sup>8</sup> regarding the provision of adapted military uniforms and personal hygiene products for servicewomen in the AFU was registered on the official website of the President of Ukraine. The petition gathered the required 25,000 signatures, with its initiators highlighting the lack of specialised uniforms for servicewomen that would account for female anatomy, as well as insufficient provision of personal hygiene products. This appeal emphasised the importance of a gender-sensitive approach to supplying servicewomen and the need to consider women's specific requirements in the AFU to enhance their combat effectiveness and service comfort.

Following civil society initiatives<sup>9</sup>, in 2023 the MoD took significant steps to improve the provision of equipment for servicewomen in the Armed Forces. One of the key achievements was the introduction of centralised procurement of specialised women's summer field uniforms and women's underwear (tops and briefs). Additionally, by the end of 2023, two models of women's body armour were certified for the first time<sup>10</sup>. Furthermore, in November 2024, the MoD announced the commencement of testing new samples of women's mid-season and winter uniforms, as well as thermal underwear<sup>11</sup>. However, as of September 2024, neither the body armour nor winter uniforms designed for women had been procured through centralised channels. Until recently, instead of specialised underwear, women were supplied with standard men's underwear, which clearly does not accommodate female anatomy. An additional challenge is the insufficient centralised procurement of hygiene products, which is critical for both women and men serving in field conditions or combat zones. This complicates adherence to basic sanitary standards and negatively impacts personnel health. The resolution of these issues may be facilitated by the Cabinet of Ministers' adoption of the "Procedure for Material, Medical, Psychological, and Social

Support for Military Personnel Considering Their Gender Characteristics<sup>12</sup>" in October 2024. Specifically, the Procedure provides for collecting gender-segregated data about military personnel and their needs, as well as supplying servicewomen with personal hygiene products, uniforms, equipment, and personal protective items, though the document does not detail implementation specifics.

# INTRODUCTION

Despite significant progress, some women in the AFU still do not receive appropriate uniforms and equipment. Consequently, ill-fitting clothing and armour may continue to affect their operational effectiveness, pose potential health risks due to the SCK's incompatibility with female physiology, and potentially lower morale due to women's sense of 'invisibility' within the military system.

## STANDARD COMBAT KIT

---

The Standard Combat Kit (SCK) for AFU servicemembers consists of field uniforms, footwear, equipment, and personal protective items, totalling 46 items. All categories of personnel, including reservists and those called up for training and assemblies, are provided with SCK items. The kit's composition is defined by Standard No. 1 "Provision of Combat Uniforms and Equipment for Servicemembers of the Armed Forces of Ukraine and the State Special Transport Service" (Standard Combat Kit)<sup>13</sup>, approved by MoD Order No. 232 of 29 April 2016 "On Material Support for Servicemembers of the Armed Forces of Ukraine and the State Special Transport Service"<sup>14</sup>.

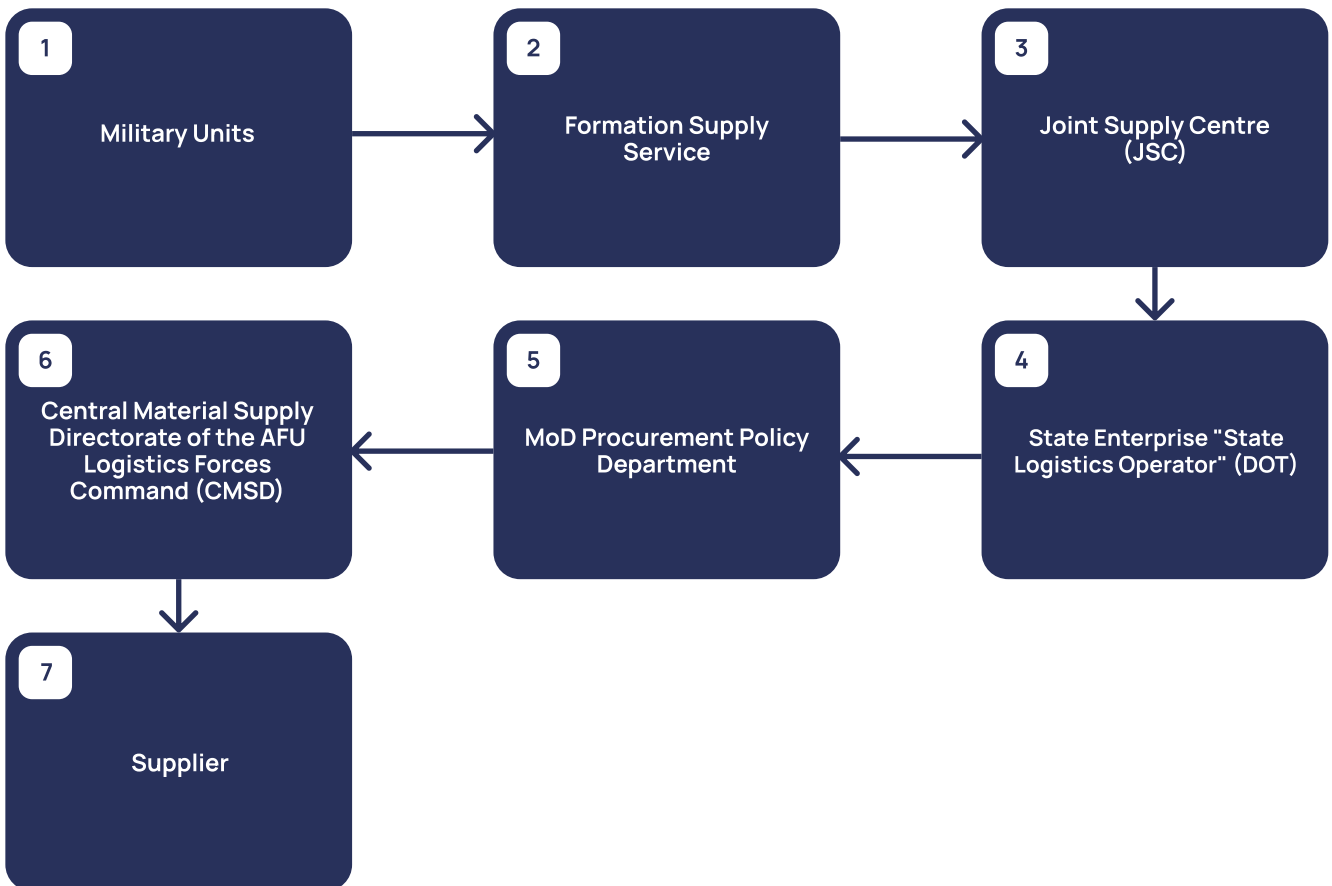
Within this list of material items, specific categories are designated exclusively for women, namely: summer field uniform (Type 2), briefs (women's), and top (women's). However, other SCK items such as winter uniforms and thermal underwear, which are not universally suitable for both sexes, are not differentiated in this list. Meanwhile, the specifications for modular and lightweight body armour include characteristics for women-adapted designs. All other items in the specified list are unified, with servicewomen being supplied according to the size range available.

## SUPPLY ORGANISATION

---

Material items are procured centrally by the Ministry of Defence State Enterprise "State Logistics Operator" (DOT) based on requests from the Central Material Supply Directorate of the AFU Logistics Forces Command (CMSD). During martial law, the MoD must approve the List and volumes of defence-related procurement of goods, works, and services (hereinafter - the List) for the year, which is formed based on Requirements determined by CMSD<sup>15</sup>. Each military unit is assigned to a specific Joint Supply Centre (JSC)<sup>16</sup>, which receives requests and distributes SCK to military units, allowing for optimised logistics based on units' geographical locations. Reports and requests from military units and formations are approved by their respective commanders.

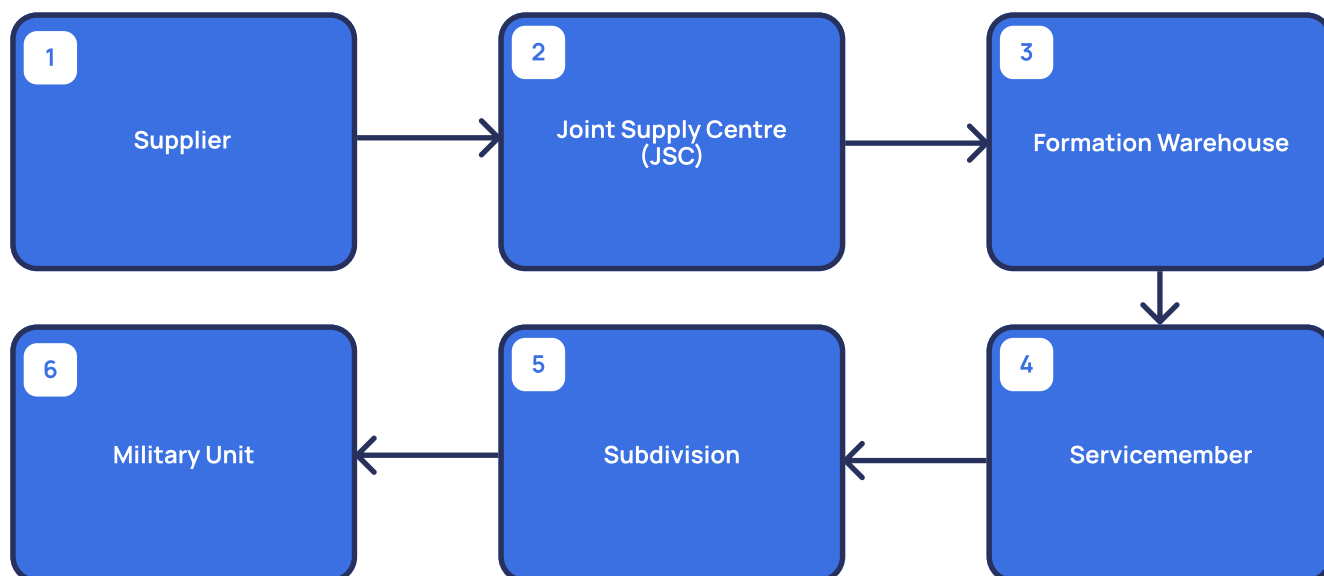
### REQUEST FORMATION ALGORITHM



## SUPPLY ORGANISATION

---

### SCK SUPPLY STAGES



Military units receive material items from formation warehouses according to established size ranges, considering measurements such as height, chest circumference, neck size, head size, etc. Individual tailoring of military uniforms is provided when it is impossible to find suitable items in standard sizes. During peacetime, supply plans also include maintaining a mandatory 10% reserve stock of supplies in military units for size matching purposes<sup>17</sup>.

Servicewomen are permitted<sup>18</sup> to have uniform items tailored at military trading ateliers or civilian establishments if ready-made uniforms and footwear from supplier companies do not fit their size and height. However, when performing combat tasks or having limited access to sewing services at military units, women more frequently turn to commercial ateliers or purchase uniforms independently<sup>19</sup>. Furthermore, considering an extensive experience between the NGO "Brave Ukraine", which implements the Arm Women Now initiative, and servicewomen, there are currently no known cases of individual uniform tailoring for women funded by the state budget.

## METHODOLOGY

---

This research analysed the technical specifications of the SCK items, as well as procurements of such items and specific hygiene-related elements carried out by the MoD from July to December 2023 and by the State Enterprise "State Logistics Operator" (DOT) from January to September 2024. The study does not cover the analysis of daily uniforms and other material items intended for women.

## METHODOLOGY

---

StateWatch analysts examined technical specifications and procurement results, focusing on item quantities, sizes, and delivery timelines for the following procurement items:



**Uniforms:**

- Women's summer field uniform
- Winter jacket
- Winter trousers
- Mid-season and winter gloves
- Polo and combat shirts




**Footwear:**

- Summer high ankle boots
- Winter high ankle boots




**Underwear:**

- Women's briefs and top
- Mid-season and cold weather thermal underwear
- Summer and winter (trekking) socks



**Personal Protective Equipment and Gear:**

- Body armour
- Helmet
- Tactical gloves



**Hygiene Items and Systems:**

- Soap
- Towel
- Shower unit

It should be noted that information about the quantity of items purchased by the MoD State Procurement Department in 2023 and their sizes is largely restricted, while available information from Prozorro is presented in the "Procurement Analysis" section.

**Only procurements with data openly available on Prozorro were analysed. This is due to non-lethal procurements by the State Procurement Department being excluded from the Prozorro system from 28 February 2022 to 23 April 2023 and subsequently published only partially, while some 2023 procedures were conducted without using the electronic platform (defence procurement). Information about such procedures is published on Prozorro in limited scope.**

Size ranges in technical specifications (TS) differ between women-specific and universal SCK elements. Therefore, to determine the quantity of purchased universal items suitable for women, technical parameters of each SCK item were analysed.

The analysis of universal SCK items' compatibility with women's sizes was based on the limit values (parameters of smallest and largest sizes) and their range from the TS of women's field uniform. Additionally, the SCK elements requirements until the end of 2024 were considered according to the List of goods and volumes. This data was provided by the MoD in response to StateWatch's request, although size range information in the List and volumes remains classified.

To analyse the combat kit user experience, 64 surveys and 6 in-depth interviews were conducted with active servicewomen from various branches of the AFU, as well as representatives of NGOs, particularly "Brave Ukraine" (ArmWomenNow) and "The Women Veterans Movement". StateWatch analysts also examined the experience of providing for women in armies of other countries.

## EVALUATION OF THE ELEMENTS OF THE COMBAT UNIFIED PACKAGE BY THE COMPOSITE INDEX.



2.28

Summer field uniform



1.32

Winter jacket



1.32

Winter trousers



1.92

Gloves



1.86

Underwear



1.86

Top



1.98

Summer socks (trekking)



1.98

Winter socks (trekking)



2.58

Summer boots



2.25

Winter boots



1.62

Body armour



1.65

Helmet



1.92

Tactical gloves

To assess the level of SCK items provision for servicewomen, a composite index has been developed with results graded across three levels: satisfactory with shortcomings (**blue**), unsatisfactory with systemic issues (**navy blue**), and critical (**red**). The evaluation is based on four indicators: technical specifications, procurement volumes, receipt, and quality. Each indicator has been assigned a weighted coefficient based on data reliability and objectivity. The aggregate score is calculated by summing the weighted scores for each indicator, with a maximum possible score of 3.0. For detailed information regarding the composite index methodology, please refer to Annex 2.

## TECHNICAL SPECIFICATIONS OF WOMEN'S SCK ITEMS

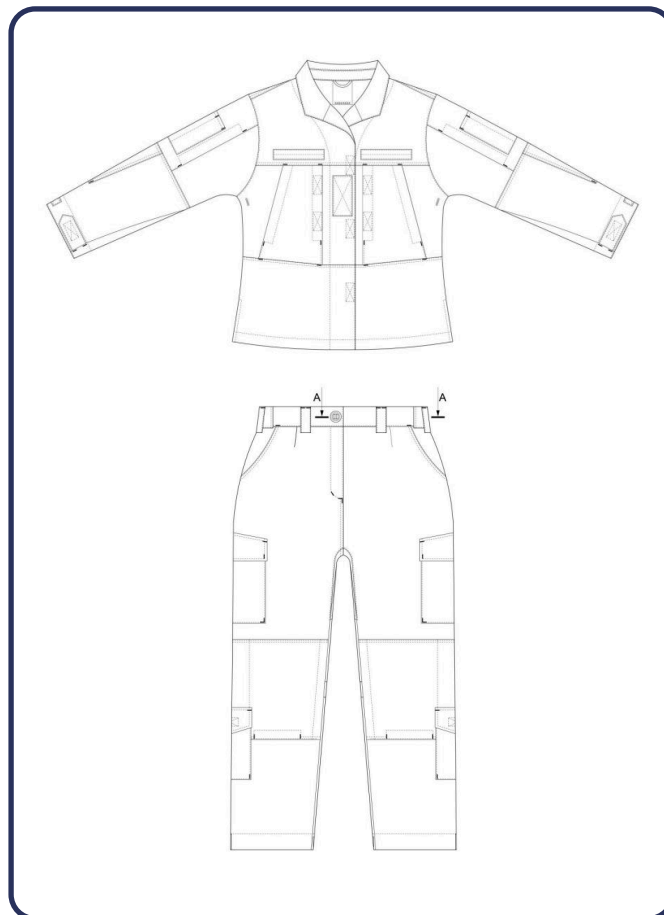
---

Among the technical specifications (TS) for combat kit items designed exclusively for servicewomen, 2 documents were approved in 2023, regulating TS for women's summer field uniform, as well as top and briefs. Technical requirements for women's body armour have been integrated into two universal TS: modular<sup>20</sup> and lightweight<sup>21</sup> body armour. Other SCK items are procured according to universal TS for both men and women.

### WOMEN'S SUMMER FIELD UNIFORM

---

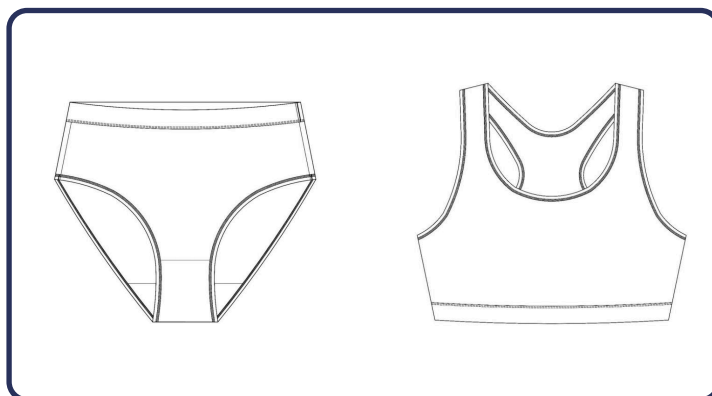
In August 2023, for the first time in the history of the AFU, a summer field military uniform for women was approved. This was achieved through information pressure and initiative from ArmWomenNow, which developed samples of women's uniform (and underwear) that subsequently underwent two stages of official testing<sup>22</sup>. Women's field uniform was officially put into service for servicewomen according to the developed technical specification<sup>23</sup>. The TS provides for a cut and fit different from the male model and covers important parameters to ensure clothing comfort and functionality, including a wide size range. The specification includes two hip-chest ratio (fullness) groups (2 and 3)<sup>24</sup> and a broad size range: bust circumference from size 40 to 64 (80-128 cm) and hip circumference (88-140 cm). Additionally, it accounts for servicewomen's different heights – from 146 cm to 188 cm, allowing for the needs of women with various anthropometric characteristics.



## WOMEN'S TOP AND BRIEFS

---

In 2023, women's underwear (tops and briefs) was approved for provision, with the requirements regulated by the relevant technical specifications from June 2023<sup>25</sup>. Underwear sizes range from XS to XL, with bust circumferences varying from 84 to 104 cm and hip circumferences from 88 to 108 cm. It should be noted that these TS for underwear do not accommodate women with larger hip and chest measurements, which are quite common among Ukrainian women, as evidenced by the size range in the TS for women's field uniforms<sup>26</sup>. However, underwear can be produced in other sizes at the customer's request and with the approval of the manufacturer. The current size range limitations indicate that only the 5 underwear samples provided to the MoD by ArmWomenNow during the development and testing phase were used as the basis for the technical specifications, which now require an extension of the size range.



## MODULAR AND LIGHTWEIGHT BODY ARMOUR

---

As of early 2024, the MoD approved two models of modular body armour for servicewomen<sup>27</sup>, developed according to the MoD technical specification from 2023<sup>28</sup>. No separate TS for women's body armour has been approved; however, current specifications for modular and lightweight body armour include an additional element under code "Ж" that provides damping (cushioning) inserts on the inner walls of the chest cover or other design solutions adapting the body armour to female anatomy.

The first modular body armour sample was developed by "Ukrainian Armour" LLC. It features an outward-curved armour plate, narrowed shoulders, and a widened bottom, considering women's anatomical features.

The second sample, developed by "Research and Production Enterprise 'Temp 3000'" LLC, is equipped with damping pads that allow individual adjustment of the body armour to the female body. The set includes three pads of different sizes, as well as an additional protective pouch with a soft ballistic package for groin area protection.

The weight of modular body armour starts from 10.5 kg, and lightweight body armour from 7.5 kg, depending on the configuration. Women's samples have the same ballistic characteristics as men's body armour according to specifications.



©MoD

## MODULAR AND LIGHTWEIGHT BODY ARMOUR

The procurement of women's body armour models was not planned in the List by the end of 2024. As of September 2024, the MoD awaits requirements from the General Staff for centralised procurement by the "State Logistics Operator" (DOT).

Other SCK items are procured for servicewomen according to the same TS as for men. The specifics of these SCK items' use by servicewomen are described in subsequent sections of the research.

Additionally, in response to StateWatch's request, the MoD reported<sup>29</sup> that according to the Action Plan for implementing the National Strategy for Creating Barrier-Free Space in Ukraine for the period until 2030<sup>30</sup>, approved by the Cabinet of Ministers of Ukraine order No. 372-p dated 25.04.2023, the Ministry has planned work on developing military uniforms for servicewomen considering anthropometric data, specifically:

- wind and water-resistant winter jacket (type 3);
- wind and water-resistant winter trousers (type 3);
- mid-season thermal underwear (type 2);
- cold weather underwear (type 2).

In 2025, the procurement of exclusively women's models is planned: modular body armour, cold weather underwear, wind and water-resistant women's jackets and trousers. In early November 2024, the MoD announced that new samples of women's uniforms, including mid-season and winter versions, are undergoing testing.

## PROCUREMENT ANALYSIS

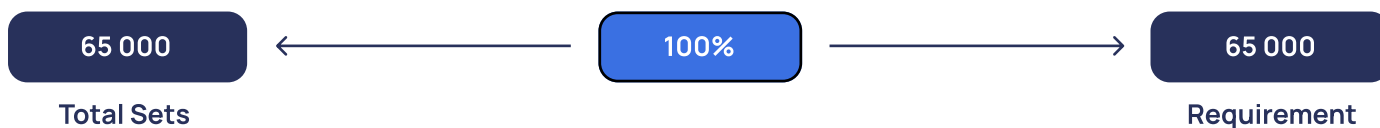
### WOMEN'S SUMMER FIELD UNIFORM

The initiation of centralised procurement of women's summer field uniforms in Ukraine marked a long-awaited step towards equal provision conditions for servicewomen, aimed at enhancing their combat comfort and field effectiveness. From January to October 2024, the State Logistics Operator (DOT) fully met the 2024 requirement for women's summer field uniforms by procuring 65,000 sets. Among these, 789 sets were purchased in the smallest size 40 (bust circumference - 80 cm, hips - 88-92 cm), and 390 sets in the largest size 64 (bust circumference - 128 cm, hips - 136-140 cm). The most popular size 48 was procured in the quantity of 11,770 sets. In 2023, the MoD delivered 50,000 sets, though their size distribution cannot be analysed due to classified data in Prozorro. **The total quantity of summer uniforms procured over two years amounts to 115,000 sets.** Since each servicewoman is entitled to two sets with a two-year service life, the procured quantity fully covers the needs of servicewomen (47,200).



Women's Summer Field Uniform Procurement  
January-October 2024

Total Sum	40	42	44	46	48	50	52	54	56	58	60	62	64
128,6 M UAH	789	5 873	7 137	9 171	11 770	8 682	8 483	5 017	3 303	2 478	1 272	635	390

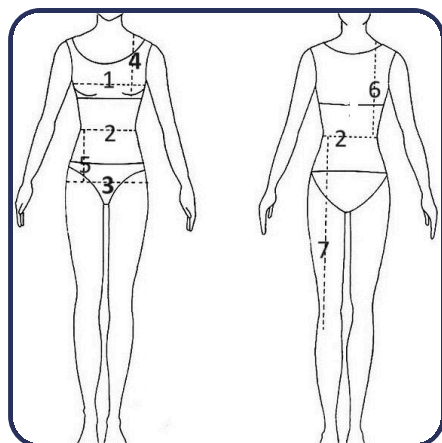


## WINTER UNIFORM

The absence of adapted women's winter uniforms in the AFU remains a significant obstacle to servicewomen's comfortable and effective performance of their duties. The winter clothing elements currently supplied by the Ministry of Defence have been designed based on male body structure. Specifically, **wind and water-resistant jackets<sup>31 32 33</sup> and trousers<sup>34 35</sup>** are procured according to universal technical specifications for all personnel regardless of gender. There are three types of specifications for jackets: from 2016<sup>36</sup> and Types No.1<sup>37</sup> and No.2<sup>38</sup> from 2023, as well as two technical specifications for trousers – two types<sup>39 40</sup> from 2023. All 2023 technical specifications have identical size grids and differ only in design features and colour variant options<sup>41</sup>. The 2016 jacket specification has simplified functionality and differs only in chest parameters with a maximum measurement of 136 cm compared to 140 cm in other specifications. Moreover, all specifications consider only 1 out of 5 parameter types for determining chest-to-hip ratio differences (third fullness group), which fails to reflect the diversity of female anatomy.

The sizes in winter jackets and trousers specifications start from size 42, with parameters showing fundamental discrepancies when compared to the minimum height, hip, and waist measurements in the technical specifications for servicewomen's summer uniforms. **For instance, the women's field uniform accommodates individuals from 143 cm in height, whereas this parameter in the mentioned universal uniform items starts from 158 cm.** Similarly with chest circumference – while the women-specific technical specification begins at 80 cm, in universal specifications this parameter starts from 84 cm.

Furthermore, the smallest waist circumference in the technical specifications for windproof and waterproof trousers is 72 cm<sup>42</sup>, indicating certain limitations in the size range for women. Moreover, hip measurements in these specifications (as well as in the specifications for the winter special suit<sup>43</sup> procured by the DOT but not included in the SCK) are not mentioned at all, and all items are designed only for the third fullness group. Whereas the summer women's uniform offers two fullness group options that account for hip-to-chest ratio differences. In contrast, the technical specifications for winter weather-resistant trousers only consider waist circumference and seat-line trouser width range of 33-50 cm<sup>44</sup>, which is insufficient for women, whose hips are typically wider than men's. The absence of detailed hip circumference parameters has resulted in trousers that may fit well at the waist but are too narrow in the hip area for some women.



The procurement analysis has shown that winter trousers and jackets in smaller sizes are being procured in critically low quantities. Although the DOT managed to contract 100% of the requirement within three quarters, the size distribution indicates ineffective consideration of women's needs in the military.

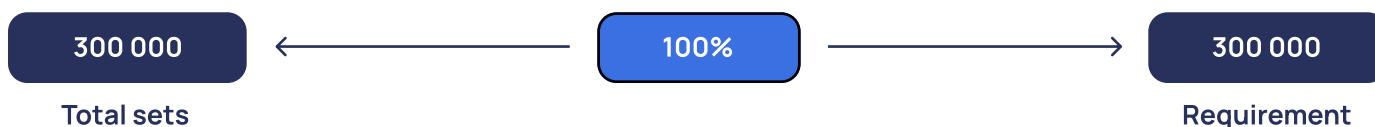
For example, only 141 pairs of trousers in the minimum size were procured for personnel of various heights, while sizes 44-46 totalled 7,036 units. The situation with jackets<sup>45</sup> is similarly concerning: only 212 units were purchased in the smallest cut (size 42), compared to 11,340 in sizes 44-46. Notably, only 77 pairs of trousers and 131 jackets were procured for all military personnel shorter than 158 cm, while individuals with smaller measurements were not considered at all – an issue typically resolved through tailoring alterations.

## WINTER UNIFORM



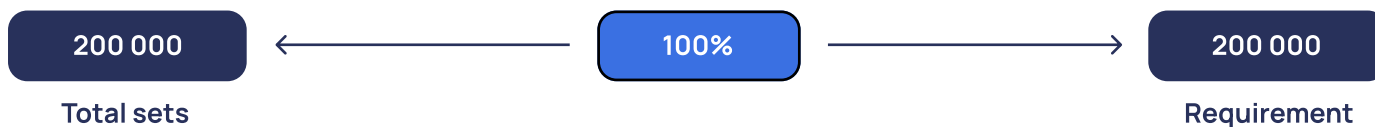
### Winter Jackets Procurement January-October 2024

Total Sum	42	44	46	48	50	52	54	56	58	60-70
816,2 M UAH	212	1 956	9 384	38 660	58 062	55 950	39 490	29 856	20 441	45 989



### Winter Trousers Procurement January-October 2024

Total Sum	42	44	46	48	50	52	54	56	58	60-70
446,8 M UAH	141	1 126	5 910	26 328	37 768	37 257	25 209	19 890	13 721	32 650



In 2023, the procurement of elements for windproof and waterproof uniforms was conducted under defence procurement procedures, therefore information about quantities and sizes remained classified. Separately, DOT procures specially insulated jackets and trousers (as of late October, 20,000 units of each had been purchased), as well as winter field uniforms (50,000 units). Although these uniform items are part of the Special Combat Kit rather than the Standard Combat Kit, they similarly do not account for female body types, and the smallest sizes are procured in rather limited quantities. Only 31 units of jackets and trousers were purchased in the smallest size 44 (equivalent to between S/M), whilst 931 units were procured in the next size up, size 46.

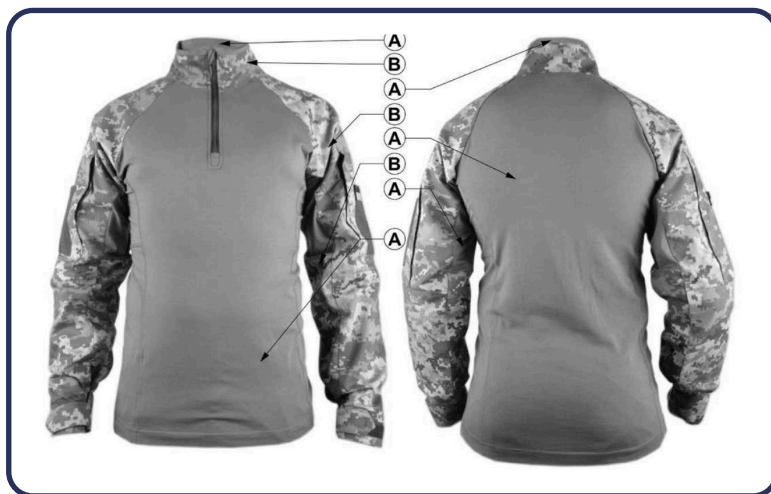
## SHIRTS

In 2024, the DOT awarded contracts for the procurement of 400,000 **polo shirts** and 300,000 **combat shirts**<sup>46</sup> to meet the needs of service personnel of both sexes. The size ranges cover a broad spectrum: from 2XS (chest circumference 70-78 cm) to 4XL (134-142 cm) for polos and from size 46 (86-94 cm) to 62 (118-126 cm) for combat shirts<sup>47</sup>, though the latter remains limited in size availability. Height ranges have been factored in, running from 149 cm to 203 cm for polos and 155 cm to 203 cm for combat shirts. In the first three quarters of 2024, procurement figures show just 12 polo shirts ordered in 2XS, compared to 470 in XS and 23,700 in S. For combat shirts, size 46 (chest 86-94 cm, height 155-167 cm) – one of the most common sizes for female personnel – saw orders of 11,275 units, highlighting a clear shortfall in provision for smaller-framed personnel.

## SHIRTS

---

As combat shirts are worn beneath body armour, a proper women's cut is essential. Without this, ill-fitting sleeves (both length and width), along with incorrect waist measurements, create excess fabric that bunches up under body armour, leading to chafing and discomfort.



## FOOTWEAR AND SOCKS

---

As of late October 2024, the DOT has procured 84.63% of the required **summer boots**<sup>48</sup> and met 100% of the requirement for **winter high-ankle boots**<sup>49</sup> – 550,000 and 450,000 pairs respectively. Notably, the final 100,000 pairs of winter boots were only contracted in October. Considering the number of service personnel and the most common women's sizes (EU 36-40) for winter boots, too few pairs suitable for most female personnel were purchased during the analysis period.



©ArмияInform

The situation is markedly better with summer boots, where procurement of smaller sizes (EU 35-37) was six times higher than winter boots over the same period. However, by the end of September, just over half of the required summer boots had been purchased (340,000 out of 650,000)<sup>50</sup>, suggesting possible procurement planning issues. In 2023, the MoD purchased over 101,800 pairs of summer boots and 25,000 winter boots. While some contracts and the full size range details remain classified, this indicates a clear disparity between summer and winter footwear procurement.

## FOOTWEAR AND SOCKS

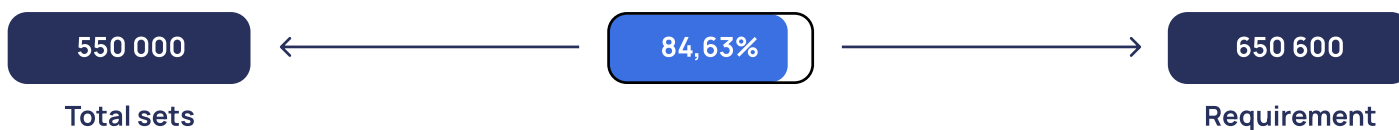
Winter boot procurement for Q4 2024 requires a review to adjust quantities per size, specifically to increase the proportion of smaller boots.

It's worth noting that while the technical specifications for summer and winter combat boots list size ranges starting at EU 36 and EU 35 respectively, both ending at EU 47/48, in practice both models are being purchased in sizes EU 35 through EU 52. This discrepancy calls for an update to the technical specifications.



### Summer Boots Procurement January-October 2024

Total Sum	35	36	37	38	39	40	41	42	43	44-52
1,29 B UAH	3 155	7 501	11 466	14 146	18 381	32 515	58 243	10 6418	117 447	181 388



### Winter Boots Procurement January-October 2024

Total Sum	35	36	37	38	39	40	41	42	43	44-52
1,1 B UAH	551	1 151	1 645	2 595	6 520	16 800	43 240	78 800	100 255	198 443



According to standard issue requirements, service personnel should receive 6 pairs of summer trekking socks and 3 pairs of winter socks annually. In the first three quarters of 2024, the DOT signed contracts for 1.5 million pairs of each type. This means winter socks were procured to cover 500,000 personnel, and summer socks for just 250,000 – notably insufficient given the total force strength exceeds 800,000<sup>51</sup>. The size range specified in the technical specifications<sup>52</sup> includes three sizes: 23-25 cm (equivalent to EU 38-40), 25-27 cm (EU 41-43), and 27-31 cm (EU 41-46). For the smallest size (23-25 cm), 225,000 pairs of winter socks were purchased, covering the requirement for 75,000 personnel, while 197,000 pairs of summer socks were procured, sufficient for just 32,800 personnel. This size distribution reflects poor planning that fails to meet the needs not only of women in service but also of male personnel with smaller feet.

## WOMEN'S UNDERWEAR

In 2024, the DOT procured 100,000 units each of **women's tops and briefs**, which covers 100% of the MoD requirements for 2024 (the requirement being two sets per year for each servicewoman). In 2023, the procurement of women's underwear was conducted under defence procurement procedures, therefore information about quantities and sizes remained classified.

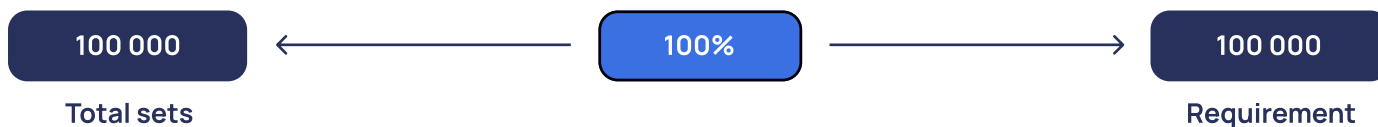
However, many servicewomen's actual measurements often exceed the largest available size XL, of which only 15,000 units were procured. Thus, the size range, which is limited to hip measurements up to 108 cm and bust measurements up to 104 cm, effectively excludes a significant proportion of women from being provided with appropriate underwear.

## WOMEN'S UNDERWEAR



### Women's Tops Procurement January-October 2024

Total Sum	XS	S	M	L	XL
18,6 M UAH	10 000	20 000	30 000	25 000	15 000



### Women's Briefs Procurement January-October 2024

Total Sum	XS	S	M	L	XL
10,99 M UAH	10 000	20 000	30 000	25 000	15 000



## MID-SEASON AND COLD WEATHER UNDERGARMENTS

According to Norm No.1 of MoD Order 232<sup>53</sup>, personnel are entitled to two sets of winter thermal underwear every two years. By late October 2024, the DOT had procured 180,000 universal cold weather undergarment sets and 600,000 mid-season base layer sets. The technical specifications for both items cover sizes XS to 3XL across three height categories: S (149-167 cm), M (167-185 cm), and L (185-203 cm).

Analysis of the TS reveals that typical women's sizes are approximately one size smaller in chest circumference than those listed in the specifications. Procurement of the smallest sizes in winter undergarments, which potentially meet women's requirements, follows this distribution: XS (equivalent to women's S) at 900 sets, and S (equivalent to women's M) at 9,900 sets. The quantities of smallest sizes procured for mid-season base layers show a slightly better picture: 3,002 sets in XS and 12,150 sets in S.

These procurement results, particularly for winter undergarments, indicate limited availability of the smallest sizes, which may not fully meet the needs of female service personnel. It is recommended to conduct additional analysis of actual winter undergarment requirements among female AFU personnel and consider adjusting both the size range and procurement volumes of smaller sizes to ensure comfort for all servicewomen. However, the MoD is already planning to develop women-specific variants of both types of undergarments<sup>54</sup>.

In 2023, the MoD State Procurement Department executed 18 successful contracts for undergarment supply, though the quantities remain classified 'for security reasons'.

The standard issue also includes short-sleeve undershirts<sup>55</sup>, allocated at 2 units per person annually. In the first three quarters of 2024, the DOT awarded 8 contracts for 1 million undershirts. According to StateWatch analysis, even the smallest sizes available (minimum garment length 69 cm), which still don't accommodate women of smaller build, were procured in insufficient numbers: size 44 (chest 86-90 cm) at just 17,200 units.



## PERSONAL PROTECTIVE EQUIPMENT

---

Most data regarding body armour procurement in 2023 remains classified for security reasons, with tender winners listed only as defence suppliers. The only publicly available information concerns contracts for 21,000 body armour units, with no disclosure of the size distribution of the purchased items.

The **combat helmet** is also part of personal protective equipment, issued at a rate of one unit per person every two years. According to technical specifications<sup>57</sup>, the DOT procures two types of ballistic combat helmets: full-cut and high-cut versions. The size range runs from the smallest size S (head circumference 51-53 cm) to XL (head circumference 60-62 cm). Helmet weight varies by model: the full-cut helmet weighs from 1.45 kg in size S to 1.75 kg in size XL, while the high-cut version is lighter, ranging from 1.35 kg (S) to 1.65 kg (XL).



©Temp 3000

By the end of October 2024, the DOT had contracted for 168,741 helmets. Notably, no size S helmets were procured before August 2024, and by October, only 2,400 units had been contracted in this size. Meanwhile, 11,737 units were purchased in medium size M (head circumference 54-56 cm), with the majority scheduled for delivery in the second half of 2024.

Overall, while this procurement approach demonstrates efforts to supply various categories of service personnel, the absence of smaller helmet sizes in the first half of the year indicates a need for more precise planning.

The 2023 procurement was conducted under classified contracts for security reasons, therefore no analysis of contracted quantities and sizes was undertaken.

Regarding the use of personal protective equipment, it is worth noting the amendments to Norm No.1 of MoD Order 232<sup>58</sup>, which reduce the list of inventory items that must be returned upon personnel transfer or discharge. Under the updated regulation, only modular body armour and ballistic helmets remain as returnable inventory items for AFU personnel. While uniform items, undergarments and footwear were already exempt from return requirements, service personnel are now also relieved from the obligation to return items such as rucksacks, sleeping bags, or wellington boots. This change significantly simplifies personnel movement procedures and takes into account the specific nature of field service conditions.

## GLOVES

---

Tactical gloves, which are classified as equipment, are issued at a rate of one pair every 2 years, whilst winter gloves, which are part of the uniform, are issued as one pair annually. The size range for tactical gloves<sup>59</sup> varies from S (hand circumference 180-189 mm) to XL (240-259 mm), whereas winter gloves<sup>60</sup> come in two sizes with hand circumferences of 200-230 mm and 230-260 mm. Over the first three quarters of 2024, contracts were placed for 100,000 pairs of tactical gloves and 242,200 pairs of winter gloves. Data regarding 2023 procurements are not available on Prozorro.

## PERSONAL PROTECTIVE EQUIPMENT

---



Analysis of size distribution shows that size L tactical gloves (hand circumference 240-260 mm) are in highest demand. 57,300 pairs of these gloves were purchased (57.3% of all tactical gloves). For winter gloves, size 2 dominates, with 275,800 pairs purchased (65.1%).

Notably, whilst tactical gloves include size S (hand circumference 180-199 mm), of which 4,852 pairs were purchased (4.9%), winter gloves do not accommodate smaller sizes, with their size range beginning at the equivalent of M (hand circumference 200-230 mm).

Given the demonstrated demand for smaller tactical gloves, as evidenced by procurement data, the technical specification for the winter model requires an expansion of its size range.

## HYGIENE PRODUCTS

---

The provision of **hygiene supplies** remains a pressing issue for many Ukrainian service personnel, particularly women. The MoD provides personnel with soap and towels, as well as access to shower facilities in field conditions. However, essential hygiene items such as menstrual pads and toilet paper are not procured through centralised purchasing. This creates significant challenges during field deployments, especially when far from populated areas. Whilst toilet paper may be purchased separately by individual military units, StateWatch analysts are aware of only isolated instances where women have been reimbursed for menstrual products.

Despite this, a significant number of military personnel are compelled to turn to volunteer organisations or use their own funds to purchase essential hygiene items. This issue gained widespread attention in November 2022 following the publication of a petition<sup>61</sup> to the President of Ukraine demanding improvements in provisions for women in the AFU, particularly regarding personal hygiene products. The petition highlighted not only the shortage of basic hygiene supplies but also the absence of specialised products necessary for extended field deployments, especially for servicewomen.

Following this, in March 2024, the Ministry of Defence approved a new technical specification for personal hygiene kits<sup>62</sup>, which, whilst not replacing proper washing in mobile shower units, are intended for temporary use in field conditions lasting more than two days. Two types of kits are specified: containing either two or three wet and dry wipes each. However, as of October 2024, procurement of these kits has not yet been initiated.

Currently, contract servicemembers and those called up for military service through mobilisation are provided with soap under Norm No. 57<sup>63</sup> at a rate of 300g per person per month. In 2024, a contract was signed for the supply of 300,000 bars of soap (100g each), which covers the annual requirement for only approximately 8,300 personnel.

## HYGIENE PRODUCTS

---

Furthermore, StateWatch analysed the regulatory requirements and procurement of towels. Norm No. 9 of MoD Order No. 232<sup>64</sup> stipulates that each servicemember should be issued a set of four cotton waffle-weave towels. However, in 2024, instead of waffle-weave towels, the DOT contracted for 850,000 terry towels measuring 50\*90 cm. Interestingly, whilst terry towels do not appear in standard provision norms, the TS<sup>65</sup> permits their use in field conditions and permanent deployment locations. This creates some ambiguity regarding the procurement's compliance with regulatory requirements. However, the document does not specify usage duration or per-person allocation. Information regarding the quantity of towels purchased in 2023 is not available.

In field conditions, servicemembers can use **shower units**<sup>66</sup> with rapid water heating boilers, which ensure proper hygiene standards in the absence of infrastructure. These units are intended for tactical units at company level. In March 2024, the Ministry of Defence approved a new TS, and in the first half of the year, DOT concluded contracts for the supply of 500 shower units, with delivery due by the end of November 2024. Open sources indicate that only 9 such units were purchased in previous years, whilst data on other possible procurement remains classified.

Analysis of the situation indicates the need for a comprehensive review of the personal hygiene provision system in the armed forces. Particular attention should be paid to the needs of servicewomen.

Another important aspect of hygiene supply is considering the possibility of officially integrating volunteer assistance into the AFU's provision system or implementing a transparent and effective monetary compensation mechanism. This would optimise resource distribution and ensure more effective coverage of military personnel's personal hygiene needs, particularly those of servicewomen.

## STANDARD COMBAT KIT USAGE EXPERIENCE BY SERVICEWOMEN

---

StateWatch Think Tank has conducted qualitative research on the specificities of uniform and equipment provision for servicewomen in the AFU. The methodology included six in-depth interviews and a survey.

The survey involved 64 servicewomen representing various branches of the military and holding diverse positions. The majority of respondents (60.9%) serve in the Ground Forces, whilst a significant proportion (18.8%) serve in the Territorial Defence Forces. The sample also included servicewomen from the Air Assault Forces, Unmanned Systems Forces, Navy, Air Force, Special Operations Forces, and the General Staff of the AFU.

The vast majority of respondents (90.6%) have combat experience since February 2022, with a significant number having been in the combat zone for over two years. The sample is almost evenly split between contract soldiers (48.4%) and volunteer mobilised personnel (51.6%).

Respondents hold a wide range of positions - from combat roles (reconnaissance operators, combat engineers, UAV operators) to medical roles (combat medics, medical instructors, doctors) and staff positions (planning officers, clerks). This diversity of positions and units has provided insight into the challenges faced by servicewomen across different service conditions.

Whilst the sample was formed on an availability basis and is not statistically representative, the qualitative approach using semi-structured in-depth interviews and questionnaires with open-ended questions allowed for data saturation. The analysis revealed a number of systemic issues in the provision of necessary uniforms and equipment for servicewomen.

## DATA COLLECTION, PLANNING AND LOGISTICS IN PRACTICE

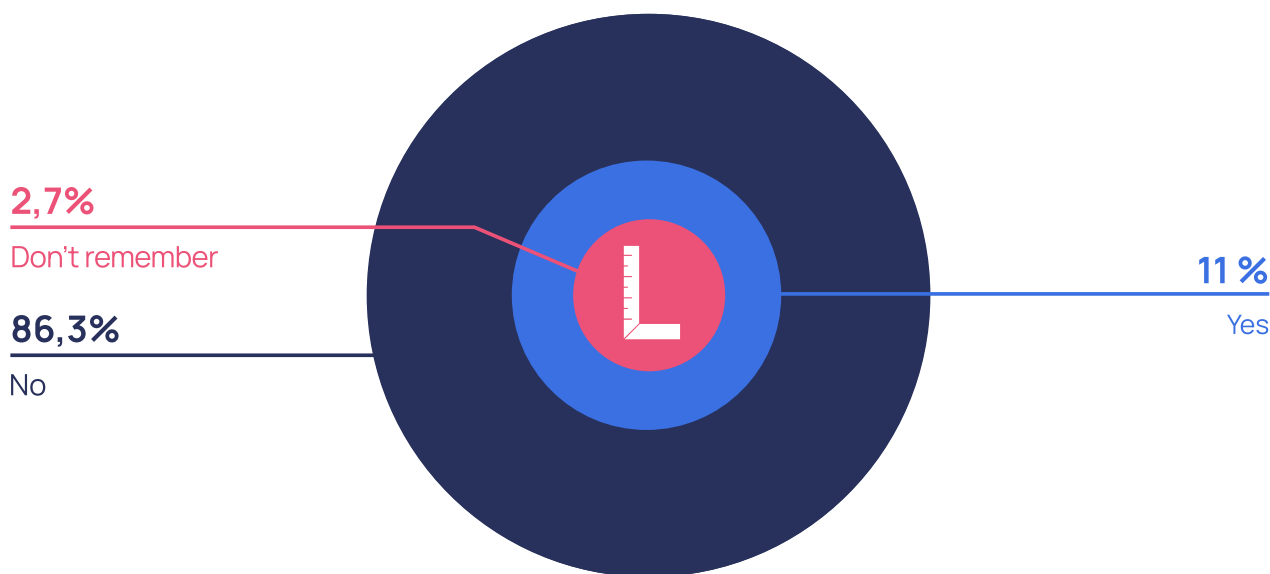
---

The proper formation of material support requirements, which takes into account individual service members' parameters, follows a specific algorithm. Military unit commanders submit their requirements to the Joint Supply Centre (JSC) of the AFU Logistics Forces Command. The Chief of Material Support is responsible for collecting information about sizes and inventory of personal requirements. Their duties also include receiving the necessary items of material support from the JSC warehouse and ensuring their timely distribution to personnel.

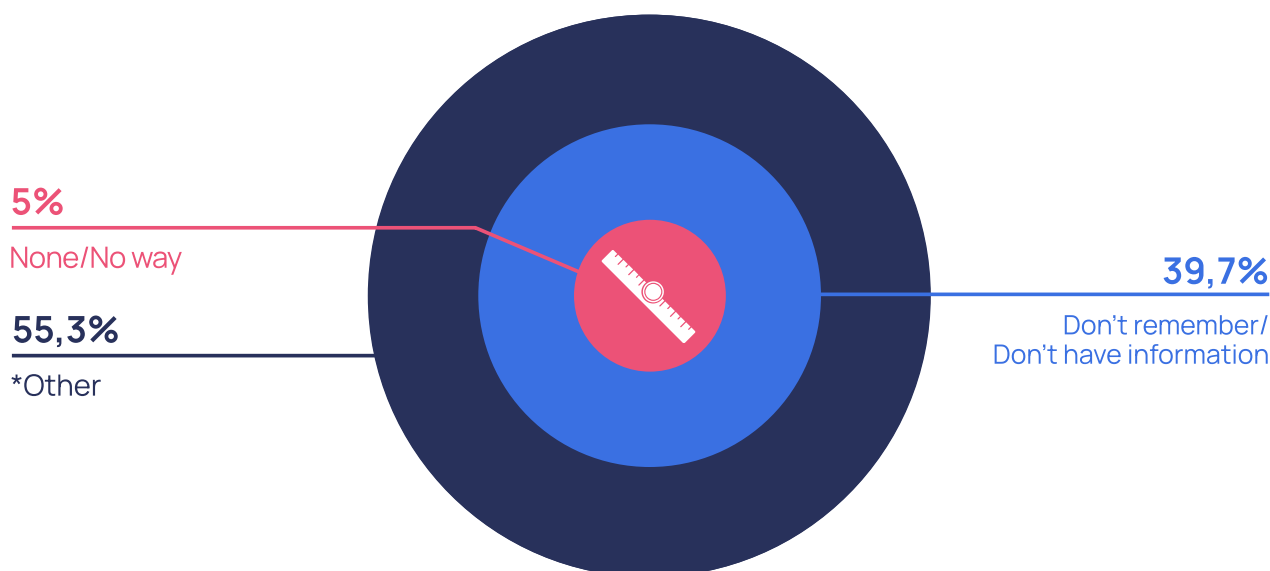
## DATA COLLECTION, PLANNING AND LOGISTICS IN PRACTICE

However, the research revealed significant discrepancies between the established procedure and actual practice. The vast majority of surveyed female service members (86%) reported that they did not receive body, head, and foot measurements before being issued equipment. A considerable proportion of respondents (40%) either lack information about or cannot recall the size data collection procedure in their military unit. 5% indicated a complete absence of size-related enquiries, whilst the remainder communicated this information through various channels – either directly to staff members or to the unit commander.

### Did you have your body, head and foot measurements taken before being issued equipment?



### How is your size communicated to the unit command?



#### Other:

- Through senior officer
- Information is collected by sergeant
- None/No way
- Through report, SMS
- Commander asks
- We compile a list

## DATA COLLECTION, PLANNING AND LOGISTICS IN PRACTICE

---

Among the barriers to proper material support, respondents cited limited availability of required sizes in warehouses, as well as insufficient motivation from chiefs of material support to provide women with properly sized SCK items.

"They have indeed started collecting sizes, asking us to measure and submit them. But they collect this information every year, and every year we end up with the same situation. They keep collecting and collecting, but nothing ever reaches us," noted a combat medic from the Territorial Defence Forces.

The research also revealed a disruption in the logical sequence of size information collection. According to one respondent, enquiries about sizes often come only after items have already arrived at the warehouses.

"Here's how it happens. The person responsible for material supplies calls from the unit: 'Send over your sizes for head, uniform, boots and everything else'. So we send them through some messenger, Signal for example. But this happens not before the deliveries, but after they've already arrived".

Analysis of the collected data indicates significant shortcomings in the logistics support system for female service members. StateWatch suggests there is a communication gap in the chain between military formations, the Joint Supply Centre and AFU Logistics Forces Command. The paper-based data accounting system creates additional opportunities for errors when processing size information.

The research showed that despite female service members providing accurate information about their sizes, they often do not receive appropriate items. It is telling that the majority of respondents did not receive the correct size even of those items (women's field uniforms and underwear) which were procured in full quantities. This indicates that the problem extends beyond the simple absence of small sizes in procurement.

Additional evidence of the system's inefficiency is the practice of trying on items directly at the warehouse before receiving them, without prior collection of size data. StateWatch analysts suggest that uniforms may be held up at various stages of the logistics chain: either at Joint Supply Centre warehouses, where chiefs of material support may not collect women's items, or at military units where they are not issued to female personnel.

Consequently, the vast majority of respondents (86%) believe that the AFU Logistics Forces Command does not adequately consider the needs of servicewomen. Only a few respondents noted some positive changes. These respondents indicated that "they are trying now, but are still at the beginning of the journey" and that "improvements are noticeable". One respondent mentioned the introduction of women's military uniforms in 2024 but highlighted the issue with their availability - "they get snapped up very quickly, and there aren't enough for all the women". A telling comment from one of the servicewomen states that "...the general army system and sexism in particular create barriers in the minds of leadership", which points to the systemic nature of the problem and its entrenchment in organisational culture.



**StateWatch recommends implementing an electronic accounting system, conducting an audit of stocks to optimise the distribution of items, and revising the procurement planning approach to account for the actual demand for smaller sizes.**

## GENERAL ISSUES

---

Respondents indicated significant problems with adapting material provisions to their needs, as most elements of equipment have been designed without considering female anatomy. A substantial portion of those surveyed indicate that "all" or "almost all" equipment is designed for men.

Among specific items, underwear is mentioned most frequently (especially men's underpants), which causes indignation among respondents as an example of complete disregard for women's needs. Servicewomen note problems with:

- uniforms that are cut to male patterns and do not account for female proportions;
- body armour that puts pressure on the chest;
- thermal underwear;
- helmets and tactical gloves.

The issue of sock sizes is separately emphasised, as they are often too large for women's feet.

Some respondents note that this issue affects not only women - male service members of smaller build face similar difficulties, which points to a general problem of lack of individual approach in providing for service personnel.

The failure to consider servicewomen's needs is a complex problem that affects various areas - from financial capability to psychological state and combat readiness.

→ Financial burden is mentioned most frequently - servicewomen are forced to spend their own money on purchasing appropriate equipment and uniforms, or on having them altered at tailors. As one respondent notes: "...instead of being able to save some money for the future, I often have to buy everything here just to serve properly".

→ The second important aspect is physical discomfort and limited mobility, which directly affects the performance of duties. Respondents note that with ill-fitting equipment "it's harder to perform basic movements", "it's difficult to react quickly when you're constrained", which can impact combat readiness.

→ The third aspect is psychological impact. Some respondents indicate that they feel like "unwanted elements in this system", that the situation is "demotivating".

"First and foremost, this is about dignity. You come as a volunteer to serve the people of Ukraine, but you face a bureaucratic, chauvinistic, patriarchal, corrupt, misogynistic system".

## RECEIPT LEVELS, SIZE COMPATIBILITY AND QUALITY OF THE STANDARD COMBAT KIT

---

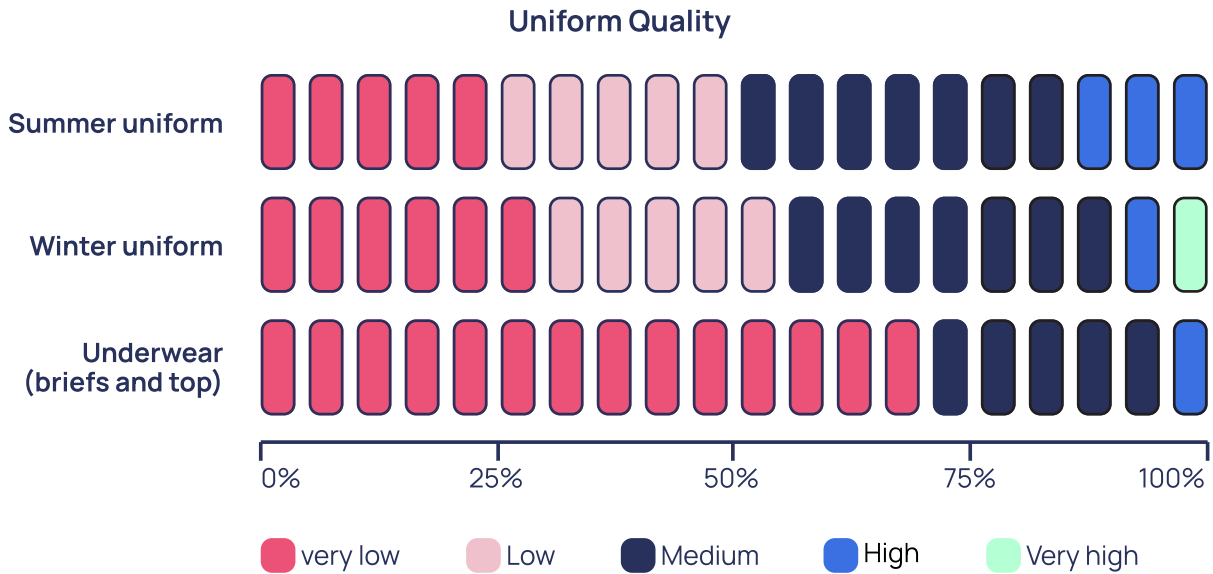
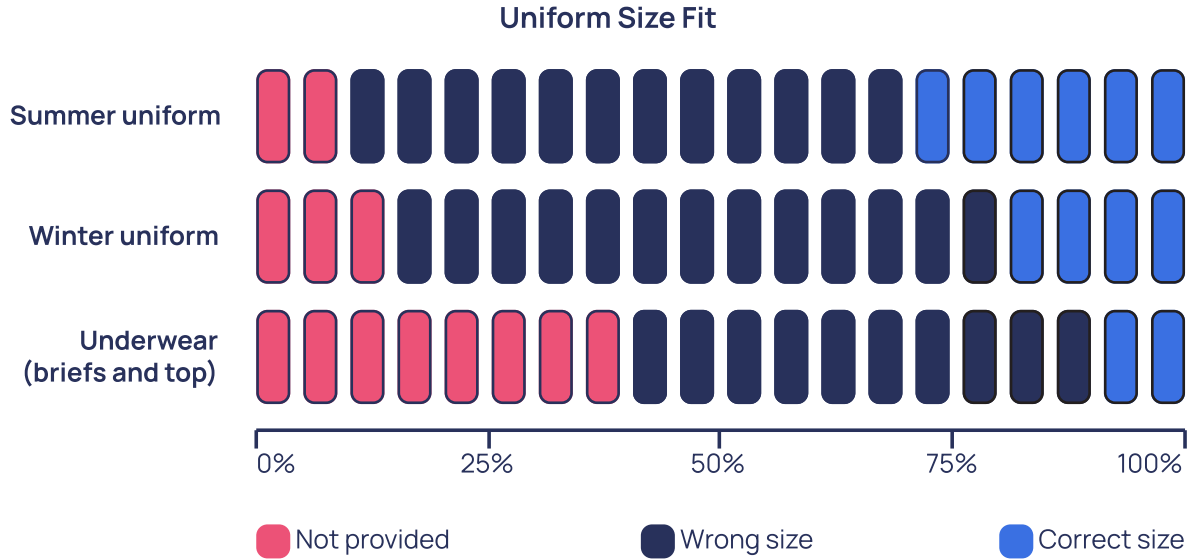
Despite the centralised procurement of women's summer field uniforms and underwear (tops and briefs) initiated in 2023, the survey has revealed significant discrepancies between actual provision levels and procurement figures. These items are elements of the Standard Combat Kit specifically designed for women.

Whilst 90.6% of female respondents received summer uniforms (including both women-specific and universal designs procured throughout 2022), nearly two-thirds faced size compatibility issues. This is particularly critical, given that the summer uniform is a fundamental equipment element required for daily service.

The situation regarding undergarments is markedly worse. Almost half of the respondents (42.2%) did not receive any women's underwear from the state at all. Among those who were issued underwear, merely 10.8% received items in their correct size.

## RECEIPT LEVELS, SIZE COMPATIBILITY AND QUALITY OF THE STANDARD COMBAT KIT

These figures are particularly problematic considering that summer uniforms and undergarments are basic requirements for comfortable service conditions. The fact that most servicewomen who received these items cannot use them due to size incompatibility points to serious shortcomings in both procurement planning and supply distribution systems.



## RECEIPT LEVELS, SIZE COMPATIBILITY AND QUALITY OF THE STANDARD COMBAT KIT

"The uniform was obviously designed for men, sizes were inadequate, and I had to either alter it or purchase my own. For instance, I've never heard of women's uniforms being available in our brigade... Combat effectiveness should be the top priority, but our current uniforms offer nothing of the sort," - reported a respondent currently serving in the Ground Forces<sup>67</sup>.

Another servicewoman illustrated the situation with underwear in her mechanised brigade:

«I've never received any women's underwear. Once they brought me size 54 men's boxers - the entire company had a laugh about it...»<sup>68</sup>.

According to the MoD's response<sup>69</sup> to an information request from Iryna Nykorak, MP and head of the Arm Women Now initiative, as of 18 October 2024, 82% of servicewomen had received summer field uniforms. This figure differs significantly from the survey findings. However, the provision rates for women's underwear (11.5% for tops and 11% for briefs) correlate with respondents' answers and confirm the critically low level of supply for these items.

## RECEIPT OF EQUIPMENT BY SERVICEWOMEN AS OF 18.10.2024

	Recipient	Summer Field Uniforms	Women's Tops	Women's Briefs
1	Land Forces Command	18 741	2 600	2 200
2	Air Force Command	9 149	1 400	1 400
3	Territorial Defence Forces Command	5 932	2 800	2 380
4	Medical Forces Command	5 279	565	1 163
5	Naval Forces Command	4 532	1 100	1 100
6	Air Assault Forces Command	1 469	700	500
7	Support Forces Command	1 268	440	440
8	Military Law Enforcement Service	1 101	350	350
9	Signal and Cyber Security Forces Command	1 012	250	200
10	Special Operations Forces	1 001	400	400
11	Others	3 776	879	583
<b>12</b>	<b>Total</b>	<b>53 260</b>	<b>11 484</b>	<b>10 716</b>
<b>13</b>	<b>Procured by DOT</b>	<b>65 000</b>	<b>100 000</b>	<b>100 000</b>
<b>14</b>	<b>Percentage received of procured items</b>	<b>82%</b>	<b>11,5%</b>	<b>11%</b>

## RECEIPT LEVELS, SIZE COMPATIBILITY AND QUALITY OF THE STANDARD COMBAT KIT

The issue is particularly acute with winter field uniforms, which are universal for all personnel but proved unsuitable in size for most surveyed women (81.8% of those who received uniforms). According to respondents, servicewomen are either forced to purchase uniforms at their own expense, alter issued items, or seek assistance from volunteer organisations. Respondents also noted that the supply situation for women improved in 2023, whereas at the beginning of the full-scale invasion, some servicewomen had to accept uniforms several sizes too large.

"They (ed. in 2022) were giving out winter jackets and trousers to everyone. I used to joke that they didn't give me a jacket, they gave me a coat. It was so large, down to my knees, and if you needed to climb into something bulkier, like armour, you had to hike up all this outerwear. The following year, the winter uniform sizes were already more suitable."<sup>70</sup>

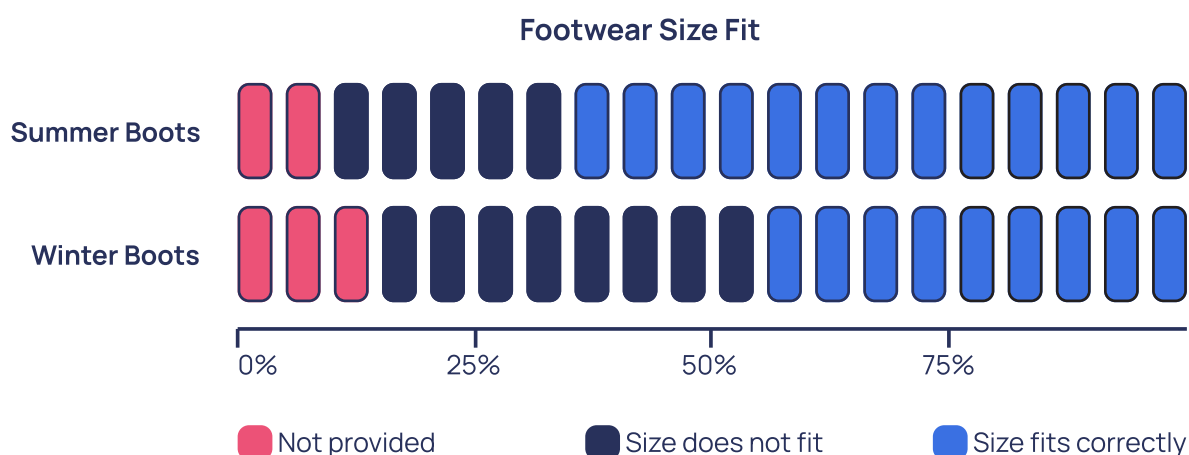
The MoD Instructions<sup>71</sup> permit made-to-measure uniforms through orders or fabric provision for servicewomen, as well as officers, warrant officers, midshipmen, and contract service personnel when appropriate sizes are unavailable. Such tailoring services at military or civilian ateliers are to be compensated by the military unit. However, in practice, women more frequently resort to altering uniforms at their own expense. Some service personnel purchase uniforms independently.

"I have a typical female body - it fits at the hips, but it's too wide at the waist. The trousers are very wide, too long, and they really wobble at the waist. When I had the chance - I had them taken in..."

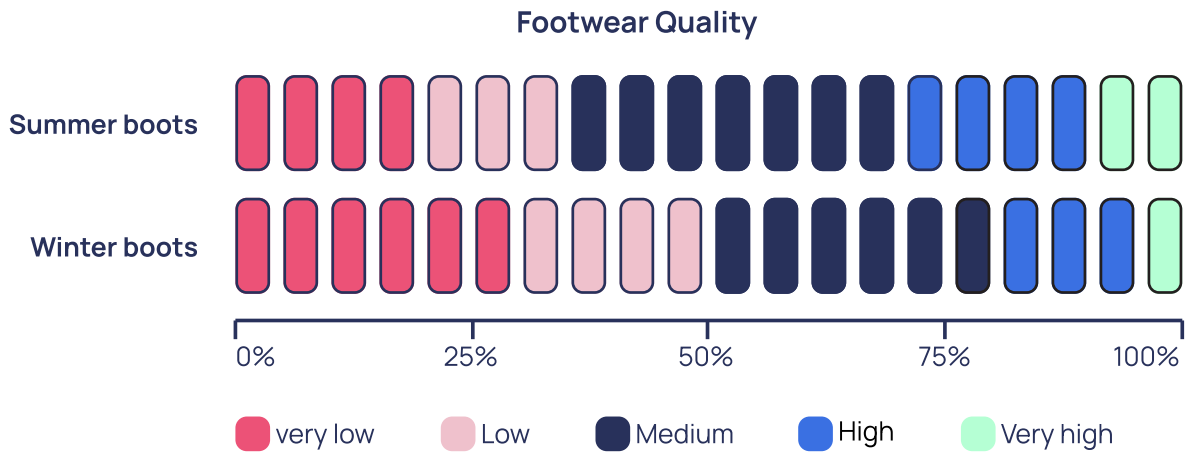
## FOOTWEAR

Women surveyed by StateWatch also frequently face difficulties in obtaining properly sized footwear.

Survey results show that 23.4% of respondents did not receive summer combat boots in their size, whilst 10.9% were not provided with this type of footwear at all. The figures for winter combat boots are even lower - 40.6% and 12.5% respectively.



## FOOTWEAR



Many servicewomen are forced to seek opportunities to exchange uniforms for smaller sizes with colleagues or turn to volunteers for assistance. This is due to standard military footwear sizes typically being oriented towards men, with smaller sizes suitable for women often unavailable in necessary quantities.

Some respondents also highlighted issues with summer boots manufactured by the Talan group of companies. According to those surveyed, these boots have poor ventilation, making them unsuitable for extended service in hot weather. However, the remaining women gave positive feedback about this manufacturer's summer footwear.

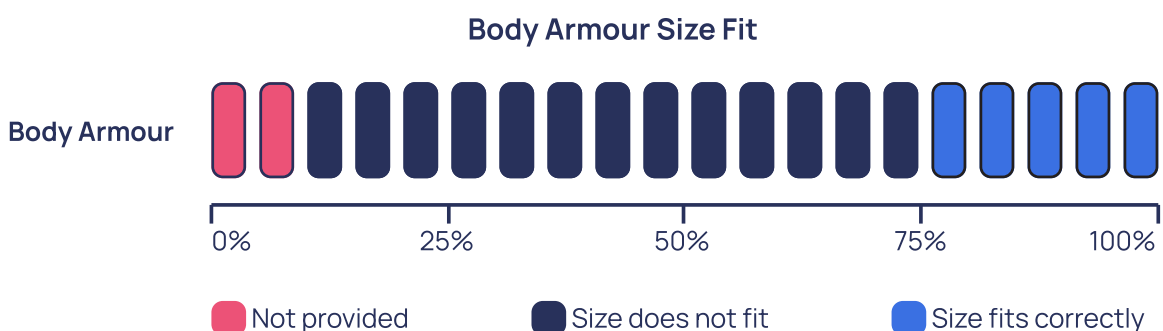
"Footwear in my size 37 wasn't available (ed. in 2022), so I had to buy everything myself. They said I could take size 40 and exchange it later... Winter boots were size 39, I exchanged them for 37, and managed to find an exchange through acquaintances."

"Initially there definitely weren't any boots my size. In 2023, I only received summer Talans along with the women's uniform at the end of the year. And I got women's trainers myself with help, not bought, but through the 'Veteranka' NGO who sent them to me. The summer Talans are hot, it's simply impossible to walk in them. In 30-35 degrees, it's hell for your feet,<sup>72</sup>" said a servicewoman from a rifle battalion of a mechanised brigade.

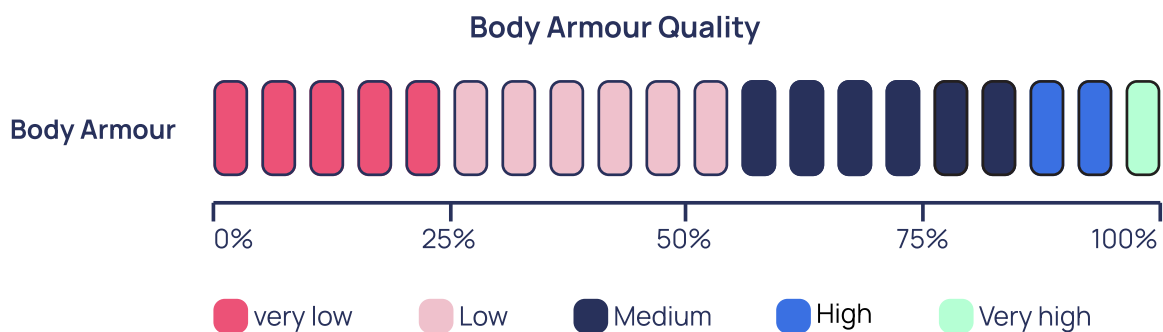
## BODY ARMOUR

The research revealed critical issues with body armour for women in the Armed Forces, related to size, poor fit, and excessive equipment weight.

70.3% of respondents indicated that their body armour did not match their size, while 6.3% were not provided with armour at all. Furthermore, 56.2% rated the quality of the issued body armour as "low" or "very low".



## BODY ARMOUR



The main challenges are excessive body armour weight and their incompatibility with female body anatomy. Respondents note that standard army body armour is too large, sits uncomfortably on the chest, and impedes movement and breathing.

"The last body armour I received was a Korsar-3, weighing 11 kg with steel plates (which is quite heavy for my 50 kg weight). They don't have anatomical curves, so it doesn't matter whether it's for a boy or a girl - they're inherently uncomfortable. It only comes in one size, there weren't any size options when they were issuing them. I bought a different one for myself. I'm now on the waiting list with the volunteer organisation Arm Women Now."

"It weighed about 10-12 kilograms. For me, this was significant, of course. It was impossible under it. If you lie down with it without physical training, you won't be able to get up afterwards, let alone do push-ups. Five times maximum, after that you can only be carried out by your feet."

A significant issue is also the quality of body armour - they are noted to damage quickly, lack a quick-release system, and have poor quality fittings. Due to these problems, a considerable number of servicewomen are forced to purchase their own plate carriers and lightweight plates or receive them from volunteer organisations. The issue is particularly acute for medics and reconnaissance personnel who require increased mobility while performing their duties.

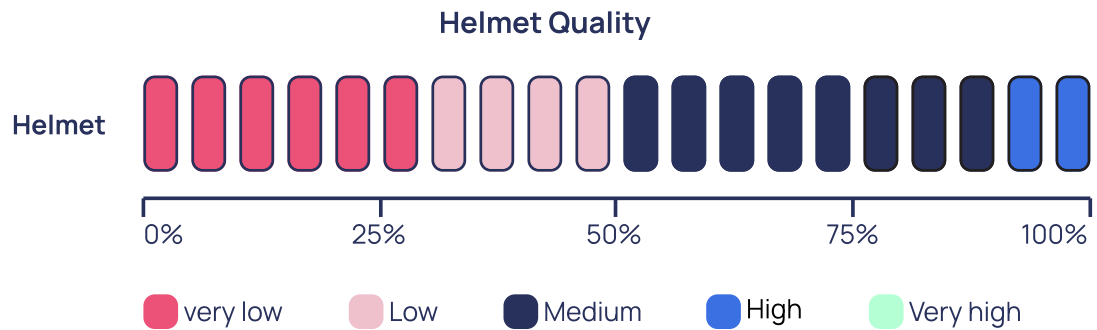
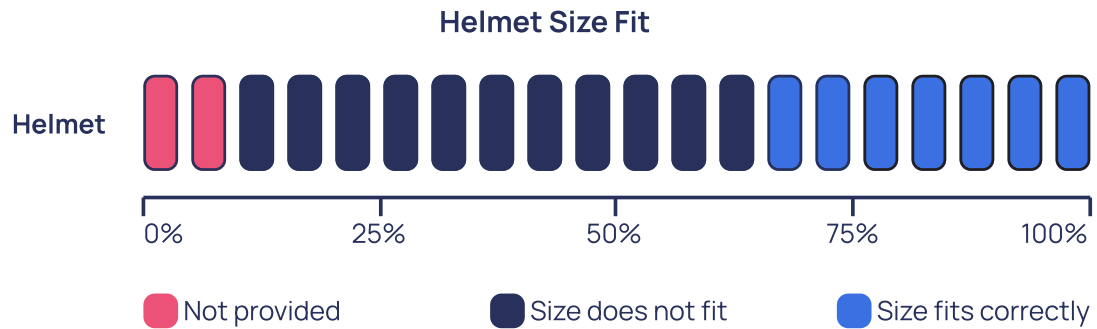
Some respondents did not receive body armour provisions at all, while those temporarily issued at training grounds are described as worn out and unfit for use. It is not always possible to receive body armour when transferring to other military units or subdivisions.

"Previously, the body armour itself was uncomfortable, so I took out the plates and put them in a plate carrier. And in the new place (ed. from May 2024), I haven't received body armour - they supposedly have some, but it depends on the people responsible for equipment supply. They told me to wait until something better comes in. I don't have an immediate need because I'm not on the zero line..."

"When I was being issued a weapon, I asked 'what about body armour and a helmet?' and they told me I didn't need these. Today, a situation has developed where they were planning to transfer me to a battery that's five kilometres from the front line and is engaged in combat. I said, 'okay, but I don't have body armour or a helmet.' They found me body armour and a helmet - the body armour was a man's one covered in blood. They're trying it on, I haven't tried it. Just the sight of it frightens me."<sup>73</sup>

## HELMET

The research has revealed significant deficiencies in providing servicewomen with personal protective equipment for head protection. According to the survey, 67.8% of female respondents who received helmets reported size incompatibility. This issue significantly impacts protection effectiveness and may lead to increased risk of injury during combat operations. Half of the servicewomen rated the quality of issued helmets as "low" and "very low".



Women face a complex set of ergonomic and functional problems when using helmets. The most common complaint is size incompatibility - a significant number of respondents indicate that the issued helmet is too large, making it resemble a "cooking pot" or "bowl" and creating problems during use. The second category of problems relates to product quality: respondents note issues with fasteners, the suspension system, rapid deterioration of the coating, and doubts about protection reliability.

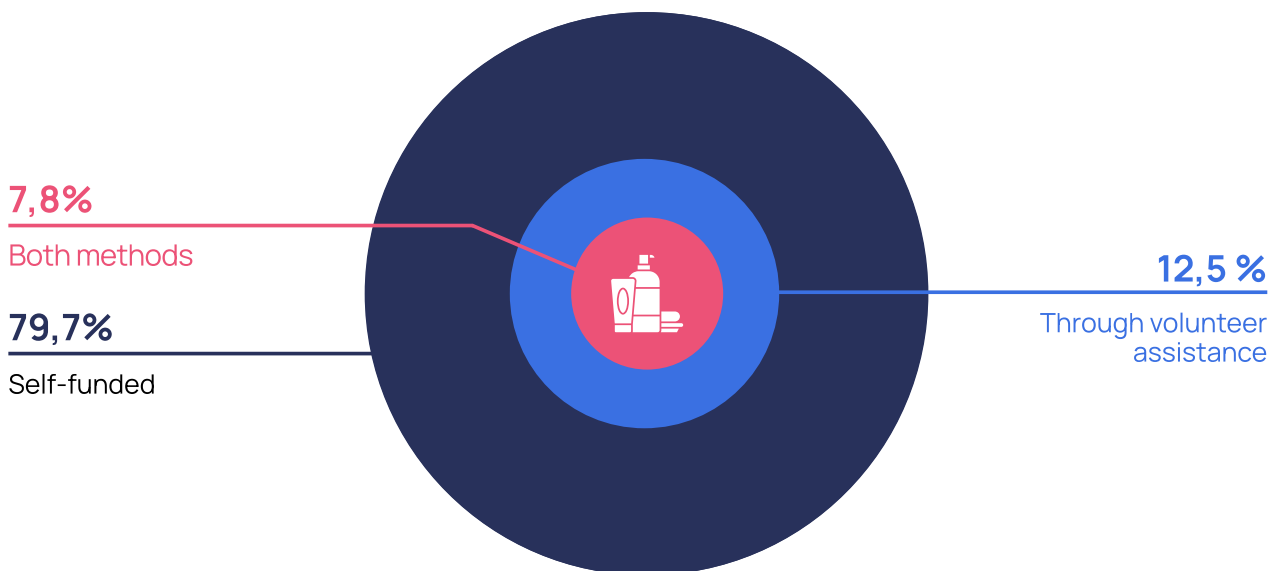
Due to unsatisfactory quality and size mismatches, many servicewomen are forced to purchase helmets independently or receive them from volunteer organisations. Some respondents were not issued helmets at all. The consequences of size incompatibility are particularly acute for women of shorter stature and those performing specific combat tasks requiring additional equipment (such as active headphones for reconnaissance personnel).

The vast majority of respondents indicated that SCK items designed for men negatively affect both the practical execution of combat tasks - "heavy body armour hinders quick movement, puts pressure on the chest and hurts the back" - and morale - "the problem is that the AFU do not take into account the very fact of women's presence in the army, we have been talking about gender equality and duties for a long time, but there is neither uniform nor underwear for women in the military. It is humiliating to be issued men's underwear and thermal wear with men's trousers".

## HYGIENE ITEMS

The survey also revealed a problematic situation regarding the provision of hygiene items to servicewomen. According to the survey, 75.8% of respondents indicated that the MoD did not provide them with necessary hygiene items. Furthermore, almost 80% of respondents are forced to purchase these items at their own expense, while 13% rely on volunteer assistance.

### How do women obtain hygiene products?



Despite procurement in 2024, only 13% received towels from the Ministry of Defence and about 36% received soap.

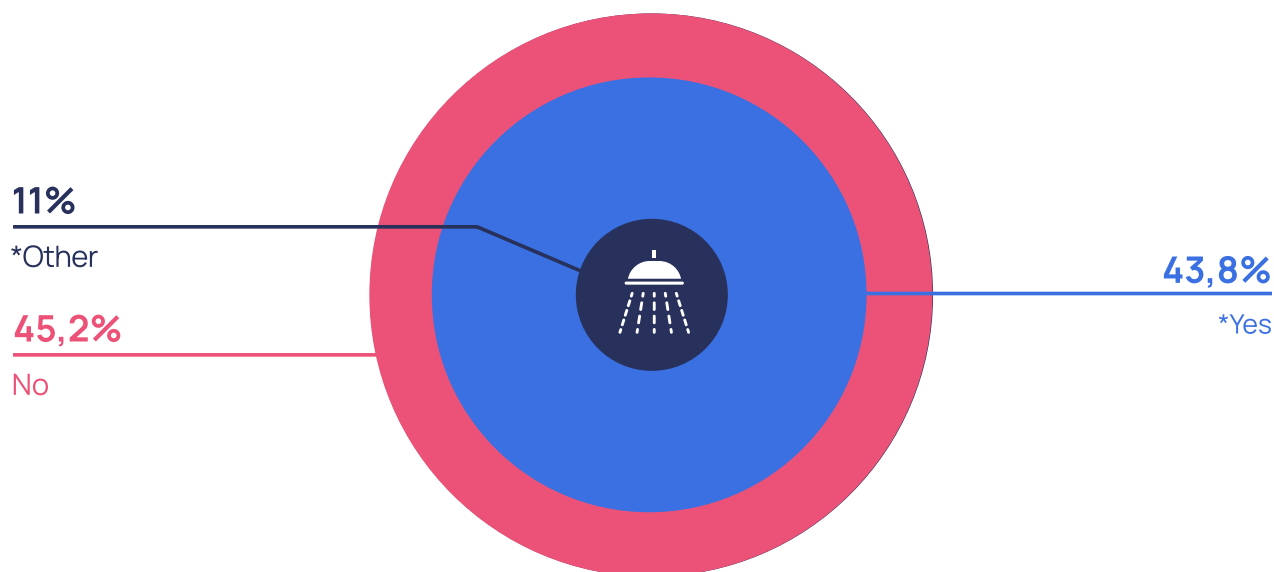
About half of the respondents confirmed the presence of shower facilities in their units, however, even when available, problems with usage are often noted due to limited access or rare opportunities for use. At the same time, a significant proportion of respondents (about 40%) indicated a complete absence of shower facilities, indicating a serious problem with basic amenities in many military units.

Some respondents reported situational access to shower facilities - only when in the rear, indicating a particularly difficult situation with hygienic conditions in the front. Servicewomen are often forced to solve the problem of access to basic hygiene conditions themselves by setting up showers.

Even where shower facilities are formally available, some respondents indicated that they were unable to use them or were unaware of their existence. This may indicate problems with communication and organisation of access to existing infrastructure. Overall, the analysis reveals a systemic problem with the provision of basic hygienic conditions for women in the military, which requires a comprehensive solution at the level of logistical support to military units.

## HYGIENE ITEMS

### Is your unit equipped with shower facilities?



#### \*Other:

- Self-made shower facilities
- Yes, but with limited access
- Probably, but I haven't seen or used them
- Yes, but they were rarely used
- Summer shower only
- Field bath available

#### \*Yes:

- 43,2% – Field/Mobile showers
- 56,8% – Permanent/Fixed facilities

The research has revealed systemic problems in providing servicewomen with basic military equipment. This significantly affects the quality of duty performance and psychological state of women in the military. The main deficiencies are related not only to the lack of proper provision but also to systemic problems in planning, logistics and property distribution. The situation is particularly critical with personal protective equipment - body armour and helmets - which in most cases do not correspond to women's sizes and anatomical features.

Despite the centralised procurement of women's summer field uniforms and underwear initiated in 2023, there is a significant gap between provision and actual usability of these items due to size inconsistencies. Most surveyed servicewomen are forced to solve uniform and equipment problems independently, spending their own funds on purchasing or adjusting items. Given that most SCK items have a male cut, this leads to wearing discomfort due to inappropriate length/width, as well as sleeve volume, waist and hip circumference.

The provision of basic hygiene items emerges as a separate issue. Many women do not receive necessary hygiene products from the state, and some lack access to shower facilities in their units. Such conditions not only create discomfort but can also negatively impact servicewomen's health, combat effectiveness and morale. The situation is particularly acute in areas close to the front line, where access to basic infrastructure is often limited or non-existent. All this indicates the need for systemic changes in the approach to planning and organising material provision, taking into account the specific needs of servicewomen.

## INTERNATIONAL EXPERIENCE

Ukraine is one of the few countries worldwide that has introduced military uniforms, body armour and other protective equipment specifically designed for women, and has begun implementing this in practice. While many countries have taken steps towards greater inclusivity, adapting military uniforms for women or developing body armour for female service members, none has advanced in this matter as much as Ukraine. Among other leaders are France, the United Kingdom and the USA, though only in specific areas.

## INTERNATIONAL EXPERIENCE

---

Even in the most progressive countries, discussions about changing and developing military uniforms to meet women's needs began relatively recently. Moreover, almost all of these changes are still primarily focused on daily uniforms (as opposed to combat or field uniforms, as they are called in Ukraine). These reforms aim to change standards that have remained since World War II, when skirts, nylon tights, and high-heeled shoes were mandatory elements of women's uniforms in most armies worldwide. Such elements were meant to emphasise femininity, sacrificing comfort and practicality for the sake of appearance and impression. This recalls early German uniforms that restricted movement and were extremely uncomfortable, as they were primarily designed to visually impress the enemy and create a sense of organisation and discipline.

For instance, only in 2019 did Canada allow its female service members to forgo high-heeled shoes, nylon tights and skirts, while the USA reconsidered its World War II-era uniform, adding options for women to replace skirts with trousers and blouses with t-shirts<sup>74 75 76</sup>. Australia's Department of Defence in 2020 prepared a comprehensive report for the government on the differences between female and male anatomy, problems women face with current uniforms, and presented extensive research on how women's uniforms should look<sup>77</sup>. Subsequently, in 2022, the Australian Defence Force announced new uniform elements and equipment specifically for women: modified footwear, smaller sleeping bags, women's underwear, and new adjustable helmet fittings to accommodate different hairstyles. Women's uniforms, smaller-sized helmets, hygiene products, and body armour for women are still under development. Some countries, such as France or Germany, introduced unisex uniforms, essentially just adding smaller sizes of existing uniforms, and even these changes only applied to specific military branches<sup>78</sup>.



The only countries that have women's versions of field uniforms are the USA and Israel. However, women's uniforms in both countries have their drawbacks. The US Army does not centrally procure uniforms, but instead provides recruits with funds to purchase them, subject to certain standards (colour, shape of certain elements, placement of pockets/patches, etc.). Women also receive additional allowances for purchasing special underwear and other necessities. This way, everyone can find uniforms that fit their individual sizes and parameters in private shops, or even have them custom-made. The uniform standards are very flexible in this regard, including various specifications for smaller sizes, different shoulder, waist and hip shapes, as well as special uniform elements for pregnant service members. Additionally, women are provided with separate additional funds for purchasing some of these elements<sup>79</sup>.

Israel also markets its uniform as unisex, but it features several drawstrings and belts (at the waist, shoulders, chest, etc.) that allow adjusting it to individual proportions. Women are also provided with two types of trousers to choose from: high-waisted and low-waisted with different pocket placements<sup>80</sup>. Israeli uniforms are still supplied within standardised sizes, and the belts merely gather the fabric, often creating additional friction in the corresponding areas<sup>81</sup>.

## INTERNATIONAL EXPERIENCE

Given the nature of changes in approaches to providing female service members with combat uniforms, only countries that are constantly engaged in active combat operations have been actively developing women's military uniforms, whilst others have focused on changes to daily uniforms. This also explains Ukraine's sudden leadership in this field, as it currently has the world's second-largest number of female service members involved in combat operations after the United States<sup>82 83</sup>.

The situation with body armour has its peculiarities. While many progressive countries, including Israel, rarely allow women to participate in combat operations<sup>84</sup>, women are permitted to work in law enforcement in all these countries<sup>85</sup>. This means that women's needs for body protection are recognised and considered. The problems women face when using standard body armour are more evident in these countries, therefore appropriate measures to adapt protective equipment have been implemented more actively.

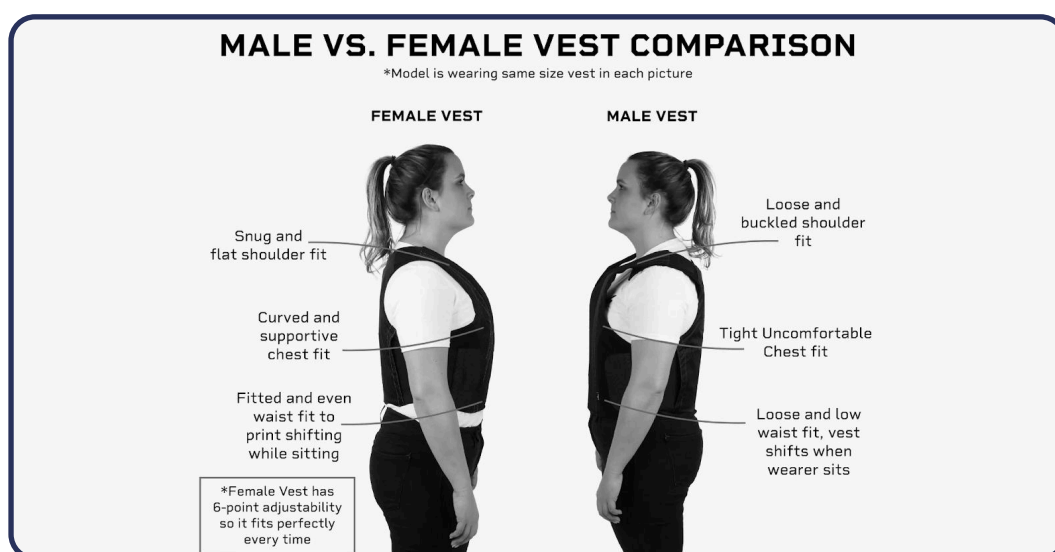


Illustration showing the differences between a standard body armour and one designed with female anatomy in mind<sup>86</sup>

Female police officers in France and Canada have been using specially designed bulletproof vests for many years. These models account for the anatomical features of the female body: some have curved front plates, others use multiple plates connected in the chest area, and almost all have a wider lower section for greater comfort. In 2023, the UK introduced third-generation bulletproof vests, including a separate model for women. It is made from lightweight materials and has a shape that provides maximum comfort and freedom of movement. The new model was tested in conditions simulating work situations: running, jumping over obstacles, working in various positions, driving vehicles and providing medical assistance. This allows women to receive maximum protection and comfort whilst performing their duties<sup>87 88</sup>. In some countries, such as Austria, such bulletproof vests are not mandatory at the national level, but are provided by regional authorities in certain areas<sup>89</sup>.

The United States leads in the development of bulletproof vests for women, where the National Institute of Justice (NIJ) in conjunction with the Department of Justice has been conducting testing and publishing standards for personal armour, known as NIJ Compliance Testing Program (NIJ CTP), as well as recommendations for its use (NIJ Selection and Application Guide) since 1978<sup>90 91</sup>. These standards are widely used both in the US and other countries: Canada, Australia, and others<sup>92</sup>. The latest version, NIJ Standard-0101.06, provides detailed recommendations for two types of armour: flat (recommended for men) and curved (recommended for women). Curved bulletproof vests take into account women's anatomical features and are used in law enforcement and the civilian market, produced by manufacturers such as Safariland, PROTECH, Hardwire and others.

In 2018, the US Army approved a modular version of the bulletproof vest - the Modular Scalable Vest (MSV). Its design is suitable for service members of different builds, both men and women. However, despite successful implementation in law enforcement, specially designed female bulletproof vests have not yet found widespread use in armies worldwide. The US remains the only country where military body armour is actively used with consideration for female service members' needs<sup>93</sup>.

## INTERNATIONAL EXPERIENCE

---

Despite significant progress in the development of female body armour, its use by the military remains limited. The US is the only country where female body armour is actively used in military units, providing better protection and comfort for female service members.

However, in the armies of other countries, particularly in Europe, such body armour is still predominantly used in law enforcement rather than military structures. This points to the need for a global review of approaches to personal protection for women in the military, taking into account their anatomical needs to improve effectiveness and safety.

## CONCLUSIONS

---

The research on the provision of equipment for women in the AFU has revealed that despite significant progress, there remain substantial deficiencies in the system of providing servicewomen with uniforms and equipment. On a positive note, the MoD is actively working to address the identified issues.

As part of implementing Ukraine's National Strategy for Creating a Barrier-Free Space by 2030, the MoD has planned the development of specialised military uniforms for women, taking into account their anthropometric characteristics. This includes the creation of women's models for winter jackets and trousers, as well as seasonal and winter undergarments. Moreover, plans for 2025 include the procurement of modular women's body armour and other elements of female uniform.

However, despite these plans, the current situation remains problematic. Even with the DOT fulfilling procurement plans for women's SCK elements, servicewomen still face difficulties in obtaining properly sized and fitted uniforms. The absence of an adequate data collection system regarding women's actual needs in the AFU hampers the process of rapid response to existing problems.

Given the growing role of women in the AFU, particularly in the context of Russia's full-scale invasion, addressing these issues has become critical. While the measures planned by the MoD are a step in the right direction, they urgently need acceleration and expansion to meet servicewomen's immediate needs.

It is also crucial to ensure systematic monitoring of the implemented changes' effectiveness and readiness for their operational adjustment. Further efforts are necessary to create a truly equitable and efficient system of provision for all AFU service personnel, regardless of their gender.

## RECOMMENDATIONS

---



### to the Ministry of Defence:

1. Conduct an audit of the provision level of Standard Combat Kit items for women in the AFU, considering different positions and branches through centralised surveying (for example, using the Army+ system);
2. Develop and approve women's specifications for winter uniform elements including windproof and waterproof trousers and jackets, insulated special suit (jacket and trousers), camouflage suit, as well as winter and mid-season undergarments;
3. Expand the size range by adding smaller sizes for such SCK items as winter gloves, combat shirts, fleece jumpers, as well as larger sizes for women's underwear specifications (tops and briefs);
4. Approve reference samples of lightweight body armour for women, winter and mid-season jackets and trousers, and thermal underwear;
5. Implement legislative mechanisms to reimburse servicewomen for hygiene products, underwear, and mid-season and winter undergarments purchased with personal funds, and simplify the reimbursement process for purchased military equipment;
6. Clarify provisions of MoD Order No. 232 by adding the concept of "Summer Field Uniform (Type 2)" instead of "Summer Field Uniform" (currently the order only uses the term "Summer Field Uniform", which doesn't cover the women's model);
7. Develop guidelines for personnel responsible for issuing uniforms regarding the specifics of sizing for servicemen and women.



### to the AFU Logistics Forces Command:

1. Initiate systematic collection of data on actual uniform sizes chosen by servicewomen for further analysis and improvement of the supply system, and implement individual data updates;
2. Review procurement planning for timely delivery of seasonal items;
3. Include in the List of Goods and Volumes for 2025 new items of women's winter uniforms, bulletproof vest, thermal underwear, as well as personal hygiene kits, and also provide for a sufficient number of items of the Combat Uniform Kit, which are purchased according to universal Technical Specifications;
4. Provide for a 10% reserve stock of SCK items for servicewomen during martial law to ensure appropriate size availability;
5. Initiate inventory counting of products delivered to Joint Supply Centre warehouses, particularly in sizes designated for women;
6. Implement a feedback system for continuous monitoring of uniform suitability for servicewomen's needs;
7. Conduct training for personnel responsible for uniform distribution regarding size selection specifics for servicewomen;

---

This research was prepared by the StateWatch think tank in collaboration with the NGO "Brave Ukraine" (Smilyva Ukraina), which implements the Arm Women Now initiative. The research is part of the support programme led by the UK Special Defence Advisor Team (SDA), implemented by the EDGE Foundation and StateWatch.

Annex 1

Special Winter Uniform Elements Procurement January-October 2024												
Item	Total Amount	Total Units	N 42	N 44	N 46	N 48	N 50	N 52	N 54	N 56	N 58	N 60-70
Winter Uniform	211,420,800	50,000	0	52	5,640	11,850	13,291	9,283	4,697	1,975	1,445	1,767
Special Insulated Jacket	64,575,960	20,000	0	0	starting size 31	931	2,851	4,340	4,440	3,305	2,920	731 451
Special Insulated Trousers	68,823,960	20,000	0	0	31	931	2,851	4,340	4,440	3,305	2,920	731 1182

Annex 2

Evaluation of Standard Combat Kit Elements Using Composite Index

SCK Element	Technical Specifications	Procurement Volume	Receipt	Quality	Score
	0.3	0.3	0.3	0.06	
	3 points - Dedicated women's TS exists 2 points - Universal TS with women's considerations 1 point - Universal TS without women's considerations 0 points - No TS exists	3 points - >80% of requirement 2 points - 50-80% of requirement 1 point - 25-50% of requirement 0 points - <25% of requirement	3 points - Over 60% received correct size 2 points - 40-60% received correct size 1 point - 20-40% received correct size 0 points - Less than 20% received correct size OR over 40% not supplied at all	5 points - Very High 4 points - High 3 points - Medium 2 points - Low 1 point - Very Low	
Women's summer field uniform	3	3	1	3.00	2.28
Winter jacket and trousers	1	3	0	2.00	1.32
Gloves	2	3	1	2.00	1.92
Underwear (briefs and top)	3	3	0	1.00	1.86
Summer (trekking) socks	1	3	2	3.00	1.98
Winter (trekking) socks	1	3	2	3.00	1.98
Summer boots	2	3	3	3.00	2.58
Winter boots	2	3	2	2.50	2.25
Body armour	2	2	1	2.00	1.62
Helmet	2	2	1	2.50	1.65
Tactical gloves	2	3	1	2	1.92

## ANNEXES

---

To assess the level of Standard Combat Kit provision for servicewomen, a composite index has been developed with results graded across three levels: satisfactory level with deficiencies (green), unsatisfactory level with systemic problems (yellow), and critical level (red). The assessment is conducted using four indicators, each assigned a weighting coefficient based on data reliability and objectivity. The aggregate score is calculated by adding the weighted scores for each indicator, with a maximum possible score of 3.0.

The composite index consists of two objective and two subjective indicators with different weighting coefficients. The objective indicators include: availability of technical specifications (0.3) and procurement volumes relative to requirements (0.3), which together account for 60% of the index weight. The subjective indicators – actual receipt of equipment (0.3) and satisfaction with quality (0.1) – are based on servicewomen's survey responses and constitute 40% of the overall assessment.

Each indicator is evaluated on a scale from 0 to 3, except for the quality satisfaction indicator, which uses a 5-point scale subsequently normalised using a coefficient of 0.6. The highest score is awarded for the existence of women-specific specifications, procurement exceeding 80% of requirements, equipment receipt by more than 60% of surveyed servicewomen, and high quality ratings of items. Zero points are assigned for absence of specifications, procurement less than 25% of requirements, receipt by less than 20% of respondents, and low quality ratings. Intermediate indicators have corresponding gradations within the scale.

The overall score for each item of equipment is calculated as the sum of products of the earned points multiplied by the corresponding indicator weighting coefficients. The results are distributed across three levels.

Scores from 2.2 to 3.0 points are classified as satisfactory level with deficiencies. The high entry threshold (2.2) is determined by the fact that even the best-supplied SCK elements still require systematic refinement.

The range of 1.8-2.1 points indicates an unsatisfactory level with systemic problems. The lower boundary of this range (1.8) reflects a situation where at least basic elements of the supply system are present – either technical specifications, procurement, or distribution. Meanwhile, the upper boundary (2.19) shows that even with most necessary elements in place, their lack of coordination prevents achieving a satisfactory level of provision.

Scores below 1.8 points are classified as critical level. This low score indicates a lack of systematic approach to provision and the inability of existing procedures to meet the needs of servicewomen.

The methodology has certain caveats regarding the interpretation of results, particularly due to the non-representative survey sample (64 respondents out of 47,200 servicewomen). Therefore, subjective indicators based on survey results have limited weight (40% in total) and are used primarily to identify systemic issues at the end-user level. The methodology also does not account for the specifics of different service branches and the peculiarities of equipment usage under various service conditions, which may require additional analysis for specific categories of servicewomen.

The evaluation is based on analysis of the MoD technical specifications, procurement data from DOT for three quarters of 2024, official MoD responses to information requests, and servicewomen survey results. The analysis of size grids considers the correspondence of size ranges to typical women's measurements and the availability of different fullness groups.

## ACRONYM DICTIONARY

---

<b>SCK</b>	Standard Combat Kit
<b>UAV</b>	Unmanned Aerial Vehicle
<b>VRU</b>	Verkhovna Rada of Ukraine (Parliament)
<b>SPD MoD</b>	State Procurement Department of the Ministry of Defence of Ukraine
<b>SE "DOT" / DOT</b>	Enterprise "State Logistics Operator" of the Ministry of Defence of Ukraine
<b>AFU</b>	Armed Forces of Ukraine
<b>CMU</b>	Cabinet of Ministers of Ukraine
<b>LFC</b>	Logistics Forces Command of the AFU
<b>MoD</b>	Ministry of Defence of Ukraine
<b>JSC</b>	Joint Supply Centre
<b>TS</b>	Technical Specification
<b>CMSD</b>	Central Material Supply Directorate of the AFU Logistics Forces Command MSV – Modular Scalable Vest
<b>MSV</b>	Modular Scalable Vest
<b>NIJ</b>	National Institute of Justice (USA)

## SOURCES

---

1. Ministry of Defence of Ukraine. (2024, June 14). Training seminar on gender issues in military operations held in Kungsängen, Sweden, organized by the Nordic Centre for Gender. [https://t.me/ministry\\_of\\_defense\\_ua/9719](https://t.me/ministry_of_defense_ua/9719)
2. Ministry of Defence of Ukraine. (2024, May 1). The number of women in the army at the beginning of January 2024 was almost 70 thousand - Natalia Kalmykova. <https://www.mil.gov.ua/news/2024/05/01/kilkist-zhinok-v-armii/>
3. Ministry of Defence of Ukraine. (2024, September 27). 68,000 women in the Armed Forces: Ministry of Defence has succeeded in implementing systemic changes in gender policy – Liudmyla Darahan. <https://www.mil.gov.ua/news/2024/09/27/68-tis-zhinok-u-zsu-minoboroni-vdalosya-vprovaditi-sistemni-zmini-u-gendernij-politiczi/>
4. Order of the Ministry of Defence of Ukraine No. 95. (2018, March 3). On approval of amendments to the Standards of material provision for servicemembers of the Armed Forces of Ukraine in peacetime and special period and amendments to the Instructions on organization of material provision for servicemembers of the Armed Forces of Ukraine in peacetime and special period. <https://zakon.rada.gov.ua/laws/show/z0378-18#n39>
5. Fakty. (2021, July 2). On parade in heels: What is known about the scandal with women's footwear in the Armed Forces. <https://fakty.com.ua/ua/ukraine/suspilstvo/20210702-na-parad-na-pidborah-shho-vidomo-pro-skandal-z-zhinochym-vzuttyam-zsu/>
6. Law of Ukraine No. 2523-VIII. (2018, September 6). On amendments to certain laws of Ukraine on ensuring equal rights and opportunities for women and men during military service in the Armed Forces of Ukraine and other military formations. <https://zakon.rada.gov.ua/laws/show/2523-19#Text>
7. Wonder Ukraine. (2023, April 7). "One of the best things that happened to me in 11 years of service": Servicewomen about women's uniforms. <https://www.wonderzine.me/wonderzine/life/experience/14681-odne-z-naykraschogo-scho-stalosya-zi-mnoyu-za-11-rokiv-sluzhbi-viyskovosluzhbovitsi-pro-zhinochu-formu>
8. Electronic Petition No.22/168516-ep. (2022, November 2). Provide women serving in the Armed Forces of Ukraine with necessary hygiene products and establish a corresponding body to address gender issues in security structures. <https://petition.president.gov.ua/petition/168516>
9. Ukrinform. (2023, July 12). Samples of women's military uniforms demonstrated to journalists. <https://www.ukrinform.ua/rubric-society/3734935-zurnalistam-prodemonstruvali-zrazki-zinocoi-viyskovoi-formi.html>
10. Ministry of Defence of Ukraine. (2024, January 11). Ministry of Defence has certified another sample of women's body armour. <https://www.mil.gov.ua/news/2024/01/11/minoboroni-sertifikuvalo-shhe-odin-zrazok-zhinochogo-bronezhiletu/?fbclid=IwAR0tW4DTlgSsD0Biu0irALGWaspapYkvckwz8diEfZmntoCjx6sjfVYKjCQ>
11. Ministry of Defence of Ukraine. (2024, November 6). Ministry of Defence is testing new samples of women's uniforms, including mid-season and winter items, and implementing elements of inclusivity. [https://www.facebook.com/story.php?story\\_fbid=880230594289394&id=100069073844828&mibextid=WC7FNe&rdid=CpKnYcst0F8lsQIX](https://www.facebook.com/story.php?story_fbid=880230594289394&id=100069073844828&mibextid=WC7FNe&rdid=CpKnYcst0F8lsQIX)
12. Resolution of the Cabinet of Ministers of Ukraine No. 1234. (2024, October 9). On approval of the Procedure for material, medical, psychological and social support of servicemembers considering the needs of women and men. <https://zakon.rada.gov.ua/laws/show/1234-2024-%D0%BF#n9>
13. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). On material support of servicemembers of the Armed Forces of Ukraine and the State Special Transport Service. <https://zakon.rada.gov.ua/laws/show/z0767-16#n379>
14. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organization of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. <https://zakon.rada.gov.ua/laws/show/z0768-16#n4>
15. Order of the Ministry of Defence of Ukraine No. 78. (2024, February 2). On certain issues of defence procurement in the logistics support direction. <https://zakon.rada.gov.ua/rada/show/v0078322-24#Text>
16. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. <https://zakon.rada.gov.ua/laws/show/z0768-16#n4>
17. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. <https://zakon.rada.gov.ua/laws/show/z0768-16#n4>
18. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. <https://zakon.rada.gov.ua/laws/show/z0768-16#n4>
19. Wonder Ukraine. (2023, April 7). "One of the best things that happened to me in 11 years of service": Servicewomen about women's uniforms. <https://www.wonderzine.me/wonderzine/life/experience/14681-odne-z-naykraschogo-scho-stalosya-zi-mnoyu-za-11-rokiv-sluzhbi-viyskovosluzhbovitsi-pro-zhinochu-formu>
20. Ministry of Defence of Ukraine. (2023, April 3). Technical specification "Modular body armour" TS A01XJ.29423-420:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2023/ts\\_bronuzelet\\_modulniy.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/ts_bronuzelet_modulniy.pdf)
21. Ministry of Defence of Ukraine. (2024, April 24). Technical specification "Lightweight body armour" TS A01XJ.29423-531:2024 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/TS\\_08\\_05\\_24\\_Bronezhilet\\_polegshenij.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TS_08_05_24_Bronezhilet_polegshenij.pdf)

## SOURCES

---

22. UKRINFORM. (2023, July 23). According to NATO standards: How ArmWomenNow organization creates women's military uniform [Za standartamy NATO: Yak orhanizatsiia ArmWomenNow stvoriuie zhinochu viiskovu formu]. <https://www.ukrinform.ua/rubric-society/3739238-za-standartami-nato-ak-organizacia-armwomennow-stvorue-zinocu-vijskovu-formu.html><https://www.ukrinform.ua/rubric-society/3739238-za-standartami-nato-ak-organizacia-armwomennow-stvorue-zinocu-vijskovu-formu.html>
23. Ministry of Defence of Ukraine. (2023, August 3). Technical specification "Summer field uniform (type 2)" TS A01XJ.03925-443:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2023/TC\\_klp\\_%20type\\_2.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/TC_klp_%20type_2.pdf)
24. For convenience in industrial clothing production, five fullness groups of typical figures were proposed, determined by the difference between hip and chest circumference: group I - 18 cm, group II - 22 cm, group III - 26 cm, group IV - 30 cm, and group V - 34 cm. [https://er.knutd.edu.ua/bitstream/123456789/5762/1/Bul2010\\_N5T3\\_P143-147.pdf](https://er.knutd.edu.ua/bitstream/123456789/5762/1/Bul2010_N5T3_P143-147.pdf)
25. Ministry of Defence of Ukraine. (2023, June 16). Technical specification "Women's underwear and top" TS A01XJ.80247-429:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2023/tc\\_trusi\\_ta\\_top.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/tc_trusi_ta_top.pdf)
26. Ministry of Defence of Ukraine. (2023, August 3). Technical specification "Summer field uniform (type 2)" TS A01XJ.03925-443:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2023/TC\\_klp\\_%20type\\_2.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/TC_klp_%20type_2.pdf)
27. Ministry of Defence of Ukraine. (2024, January 11). Ministry of Defence has certified another sample of women's body armour. <https://www.mil.gov.ua/news/2024/01/11/minoboroni-sertifikuvalo-shhe-odin-zrazok-zhinochogo-bronezhiletu/>
28. Ministry of Defence of Ukraine. (2023, April 3). Technical specification "Modular body armour" TS A01XJ.29423-420:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2023/ts\\_bronuzelet\\_modulnyi.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/ts_bronuzelet_modulnyi.pdf)
29. Ministry of Defence of Ukraine. (2024, August 14). Response to the information request. [https://drive.google.com/file/d/15lefEY8lr1oGsBZda5VMvHmDMFdvJwbn/view?usp=drive\\_link](https://drive.google.com/file/d/15lefEY8lr1oGsBZda5VMvHmDMFdvJwbn/view?usp=drive_link)
30. Order of the Cabinet of Ministers of Ukraine No. 366-r. (2021, April 14). On approval of the National Strategy for Creating a Barrier-Free Environment in Ukraine for the period until 2030. <https://zakon.rada.gov.ua/laws/show/366-2021-%D1%80/conv#n10>
31. Ministry of Defence of Ukraine. (2023, May 22). Technical specification "Winter windproof and waterproof jacket (type 2)" TS A01XJ.14760-423:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/%D0%A2%D0%A1%20%D0%9A%D0%92%D0%92%D0%97%20%D1%82%D0%B8%D0%BF%20%20.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/%D0%A2%D0%A1%20%D0%9A%D0%92%D0%92%D0%97%20%D1%82%D0%B8%D0%BF%20%20.pdf)
32. Ministry of Defence of Ukraine. (2016, November 30). Technical conditions "Winter windproof and waterproof jacket – KVVZ" TU 14.1-134-00034022-2016. [https://drive.google.com/file/d/1405eWht2TixmO-iYotexkaPqDRL\\_a-St/view?usp=sharing](https://drive.google.com/file/d/1405eWht2TixmO-iYotexkaPqDRL_a-St/view?usp=sharing)
33. Ministry of Defence of Ukraine. (2024, February 16). Technical specification "Winter windproof and waterproof jacket (type 1)" TS A01XJ.14759-423:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2023/TS\\_KVVZ\\_type1.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/TS_KVVZ_type1.pdf)
34. Ministry of Defence of Ukraine. (2023, May 23). Technical specification "Winter windproof and waterproof trousers (type 2)" TS A01XJ.14763-428:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/TS\\_SHVVZ\\_typ\\_2.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TS_SHVVZ_typ_2.pdf)
35. Ministry of Defence of Ukraine. (2024, February 16). Technical specification "Winter windproof and waterproof trousers (type 1)" TS A01XJ.14762-497:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/TS\\_zamina\\_shtani\\_vitrovologozahisni\\_zimovi.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TS_zamina_shtani_vitrovologozahisni_zimovi.pdf)
36. Ministry of Defence of Ukraine. (2016, November 30). Technical conditions "Winter windproof and waterproof jacket – KVVZ" TU 14.1-134-00034022-2016. [https://drive.google.com/file/d/1405eWht2TixmO-iYotexkaPqDRL\\_a-St/view?usp=sharing](https://drive.google.com/file/d/1405eWht2TixmO-iYotexkaPqDRL_a-St/view?usp=sharing)
37. Ministry of Defence of Ukraine. (2024, February 16). Technical specification "Winter windproof and waterproof jacket (type 1)" TS A01XJ.14759-423:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2023/TS\\_KVVZ\\_type1.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/TS_KVVZ_type1.pdf)
38. Ministry of Defence of Ukraine. (2023, May 23). Technical specification "Winter windproof and waterproof jacket (type 2)" TS A01XJ.14760-423:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/%D0%A2%D0%A1%20%D0%9A%D0%92%D0%92%D0%97%20%D1%82%D0%B8%D0%BF%20%20.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/%D0%A2%D0%A1%20%D0%9A%D0%92%D0%92%D0%97%20%D1%82%D0%B8%D0%BF%20%20.pdf)
39. Ministry of Defence of Ukraine. (2023, May 23). Technical specification "Winter windproof and waterproof trousers (type 2)" TS A01XJ.14763-428:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/TS\\_SHVVZ\\_typ\\_2.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TS_SHVVZ_typ_2.pdf)
40. Ministry of Defence of Ukraine. (2024, February 16). Technical specification "Winter windproof and waterproof trousers (type 1)" TS A01XJ.14762-497:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/TS\\_zamina\\_shtani\\_vitrovologozahisni\\_zimovi.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TS_zamina_shtani_vitrovologozahisni_zimovi.pdf)
41. The specifications are almost identical in basic parameters: same height values (eight sizes from 158 to 200 cm) and intervals between them, same waist circumference determination system (third fullness group). The only significant difference is the expansion of the chest circumference size range in the new 2023 specifications to 140 cm (15 sizes), while in the 2016 technical conditions the maximum size was 136 cm (14 sizes). Type 2 also differs in sleeve length, which is 3 cm longer compared to Type 1 and 2016 technical conditions at the same heights. All other size grid parameters are identical.

## SOURCES

---

42. Ministry of Defence of Ukraine. (2023, May 23). Technical specification "Winter wind and water-resistant trousers (type 2)" TS A01XJ.14763-428:2023 (01). [https://www.mil.gov.ua/content/ddz/TY\\_2024/TS\\_SHVVZ\\_typ\\_2.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TS_SHVVZ_typ_2.pdf)
43. Ministry of Defence of Ukraine. (2018, September 28). Technical description "Winter special uniform". [https://drive.google.com/file/d/1vbteVMLEHIWq0SXYTBAHimYcTDGlySAD/view?usp=share\\_link](https://drive.google.com/file/d/1vbteVMLEHIWq0SXYTBAHimYcTDGlySAD/view?usp=share_link)
44. Seat-line in the pattern is a line that marks the place of maximum hip or buttocks width in trousers or other clothing covering the hips. It determines the point where clothing needs maximum freedom of movement for the legs. <https://www.nytkosvit.com.ua/kreslennya-shtaniv/>
45. Ministry of Defence of Ukraine. (2023, May 23). Technical specification "Winter windproof and waterproof jacket (type 2)" TS A01XJ.14760-423:2023 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2024/%D0%A2%D0%A1%20%D0%9A%D0%92%D0%92%D0%97%20%D1%82%D0%B8%D0%BF%20%20.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/%D0%A2%D0%A1%20%D0%9A%D0%92%D0%92%D0%97%20%D1%82%D0%B8%D0%BF%20%20.pdf)
46. Ministry of Defence of Ukraine. (2020, August 17). Technical specification "Polo shirt" TS A01XJ.30593-266:2020 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2021/TS\\_sorochka-polo\\_OSTATOCHNA.pdf](https://www.mil.gov.ua/content/ddz/TY_2021/TS_sorochka-polo_OSTATOCHNA.pdf)
47. Ministry of Defence of Ukraine. (2018, December 6). Technical conditions "Combat shirt" TU U 14.1-00034022-095:2015 [https://www.mil.gov.ua/content/tenders\\_2019/TY\\_SB.pdf](https://www.mil.gov.ua/content/tenders_2019/TY_SB.pdf)
48. Ministry of Defense of Ukraine. (2020, August 17). Technical specification "Summer boots" TS A01XJ.45279-267:2020 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2020/TS\\_CHEREVIKI\\_LITNI\\_OSTATOCHNA.pdf](https://www.mil.gov.ua/content/ddz/TY_2020/TS_CHEREVIKI_LITNI_OSTATOCHNA.pdf)
49. Ministry of Defense of Ukraine. (2024, August 29). Technical specification "Winter high-ankle boots" TS A01XJ.14755-362:2022 (01) [https://www.mil.gov.ua/content/27302024/TS\\_ChEREVYKI\\_ZYMOVI\\_zi\\_zminoiu\\_2\\_redaktsiia.pdf](https://www.mil.gov.ua/content/27302024/TS_ChEREVYKI_ZYMOVI_zi_zminoiu_2_redaktsiia.pdf)
50. Ministry of Defence of Ukraine. (2024, August 7). Response to the information request. [https://drive.google.com/file/d/1ZkvX2w9hOC51XPk8Bw23mRW85F7y-vir/view?usp=drive\\_link](https://drive.google.com/file/d/1ZkvX2w9hOC51XPk8Bw23mRW85F7y-vir/view?usp=drive_link)
51. Fakty. (2024, February 23). What is the strength of the Armed Forces in 2024: How many military personnel are at the front [Yaka chyselnist ZSU u 2024 rotsi: skilky viiskovykh perebuvaie na fronti]. <https://fakty.com.ua/ua/ukraine/20240223-yaka-chyselnist-zsu-u-2024-rocz-i-skilky-vijskovykh-perebuvaie-na-fronti/>
52. Ministry of Defense of Ukraine. (2022, March 12). Technical specification "Summer and winter socks" TS A01XJ.37739-360:2022 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2022/TS\\_Shkarpetky\\_\(SHL,SHZ\)\\_360\\_.pdf](https://www.mil.gov.ua/content/ddz/TY_2022/TS_Shkarpetky_(SHL,SHZ)_360_.pdf)
53. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. [https://www.mil.gov.ua/content/ddz/TY\\_2024/normi\\_zabezp\\_29.04.2016\\_232.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/normi_zabezp_29.04.2016_232.pdf)
54. Ministry of Defense of Ukraine. (2024, February 16). Technical specification "Fleece jacket (short-sleeve)" TS A01XJ.03070-442:2023 (01) <https://drive.google.com/drive/u/2/folders/1kE7cxn54LHTbh4jANcrsWlFAOrgZ09Ws>
55. Ministry of Defense of Ukraine. (2024, February 16). Technical specification "Fleece jacket (short-sleeve)" TS A01XJ.03070-442:2023 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2023/TS\\_fufayka.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/TS_fufayka.pdf)
56. Ministry of Defense of Ukraine. (2023, April 3). Technical specification "Modular bulletproof vest" TS A01XJ.29423-420:2023 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2023/ts\\_bronuzelet\\_modulniy.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/ts_bronuzelet_modulniy.pdf)
57. Ministry of Defense of Ukraine. (2023, May 10). Technical specification "Full-size ballistic combat helmet" TS A01XJ.34494-418:2023 (01) with amendment No. 1 [https://www.mil.gov.ua/content/ddz/TY\\_2023/ts\\_sholom\\_boyvovuy\\_balistuchniy\\_povnirozom.pdf](https://www.mil.gov.ua/content/ddz/TY_2023/ts_sholom_boyvovuy_balistuchniy_povnirozom.pdf)
58. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. <https://zakon.rada.gov.ua/laws/show/z0767-16#Text>
59. Ministry of Defense of Ukraine. (2020, September 29). Technical specification "Tactical gloves" TS A01XJ.68845-254:2020 (01) with amendment No. 1 [https://www.mil.gov.ua/content/ddz/TY\\_2020/TS\\_Rykavichki\\_takt\\_zi\\_zminou.pdf](https://www.mil.gov.ua/content/ddz/TY_2020/TS_Rykavichki_takt_zi_zminou.pdf)
60. Ministry of Defense of Ukraine. (2022, March 12). Technical specification "Winter gloves" TS A01XJ.32473-361:2022 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2022/TS\\_rukavychky\\_zymovi\\_361.pdf](https://www.mil.gov.ua/content/ddz/TY_2022/TS_rukavychky_zymovi_361.pdf)
61. Electronic Petitions to the President of Ukraine. (2022, November 2). Petition: Provide women serving in the Armed Forces of Ukraine with necessary hygiene products and create an appropriate body to deal with gender issues in security structures. №22/168516-en <https://petition.president.gov.ua/petition/168516>
62. Ministry of Defense of Ukraine. (2024, March 14). Technical specification "Personal hygiene kit" TS A01XJ.21007-501:2024 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2024/TS\\_suhyi\\_dush.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TS_suhyi_dush.pdf)
63. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. [https://www.mil.gov.ua/content/ddz/TY\\_2024/normi\\_zabezp\\_29.04.2016\\_232.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/normi_zabezp_29.04.2016_232.pdf)
64. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. [https://www.mil.gov.ua/content/ddz/TY\\_2024/normi\\_zabezp\\_29.04.2016\\_232.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/normi_zabezp_29.04.2016_232.pdf)

## SOURCES

---

65. Ministry of Defense of Ukraine. (2019, September 12). Technical specification "Terry towel" TS A01XJ.01817-184:2019 (01) [https://www.mil.gov.ua/content/ddz/TS\\_ryshnik\\_mahrovij1.pdf](https://www.mil.gov.ua/content/ddz/TS_ryshnik_mahrovij1.pdf)
66. Ministry of Defense of Ukraine. (2024, March 25). Technical specification "Shower installation - rapid water heating boiler" (Type 2) TS A01XJ.07148-464:2024 (01) [https://www.mil.gov.ua/content/ddz/TY\\_2024/TC\\_KSHNV\\_type2\\_0104.pdf](https://www.mil.gov.ua/content/ddz/TY_2024/TC_KSHNV_type2_0104.pdf)
67. Interview with respondent #1
68. Interview with respondent #2
69. Ministry of Defence of Ukraine. (2024, August 7). Response to the information request. [https://drive.google.com/file/d/15lefEY8lr1oGsBZda5VMvHmDMFdvJwbn/view?usp=drive\\_link](https://drive.google.com/file/d/15lefEY8lr1oGsBZda5VMvHmDMFdvJwbn/view?usp=drive_link)
70. Interview with respondent #4
71. Order of the Ministry of Defence of Ukraine No. 232. (2016, April 29). Instructions on the organisation of material support for servicemembers of the Armed Forces of Ukraine in peacetime and special period. <https://zakon.rada.gov.ua/laws/show/z0768-16#n4>
72. Interview with respondent #3
73. Interview with respondent #3
74. Canadian Forces College: «BEYOND PONYTAILS, PANTYHOSE AND PUMPS: KEEPING WOMEN'S EQUALITY ON THE CANADIAN ARMED FORCES AGENDA» <https://www.cfc.forces.gc.ca/259/290/308/305/turcotte.pdf>
75. National Post: «Canada's military is adopting a gender-neutral dress code. What was so gendered about it before?» <https://nationalpost.com/news/canada/canadas-military-is-adopting-a-gender-neutral-dress-code-what-was-so-gendered-about-it-before>
76. U.S. Army: «Army Uniforms» <https://www.army.mil/uniforms/>
77. ABC News: «Defence Department attempts to explain differences between women and men» [https://www.abc.net.au/news/2020-06-08/defence-learns-the-differences-between-men-and-women/12327470?utm\\_campaign=abc\\_news\\_web&utm\\_content=link&utm\\_medium=content\\_shared&utm\\_source=abc\\_news\\_web](https://www.abc.net.au/news/2020-06-08/defence-learns-the-differences-between-men-and-women/12327470?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web)
78. Shoulder to Shoulder Yet Worlds Apart: Variations in Women's Integration in the Militaries of France, Norway, and the United States - Kyleanne Hunter, University of Denver, 2019
79. U. S. Army: «The Army's drive to address equality in uniforms and personal equipment» [https://www.army.mil/article/257157/the\\_armys\\_drive\\_to\\_address\\_equality\\_in\\_uniforms\\_and\\_personal\\_equipment](https://www.army.mil/article/257157/the_armys_drive_to_address_equality_in_uniforms_and_personal_equipment)
80. The Jerusalem Post: «Soldiers take note: The clothing revolution in the IDF is underway» <https://m.jpost.com/israel-news/article-724067>
81. Israel National News: <https://www.israelnationalnews.com/news/355658>
82. 26 Countries Where Women Play a Huge Role in the Military <https://247wallst.com/special-report/2023/10/22/26-countries-where-women-play-a-huge-role-in-the-military/>
83. Міністерство Оборони України: «Кількість жінок в армії на початок січня 2024 року становила майже 70 тисяч – Наталія Калмикова» <https://www.mil.gov.ua/news/2024/05/01/kilkist-zhinok-v-armii/>
84. The Institute for National Security Studies : «Strategic Assessment» [https://www.inss.org.il/strategic\\_assessment/opening-all-combat-positions-in-the-idf-to-women/](https://www.inss.org.il/strategic_assessment/opening-all-combat-positions-in-the-idf-to-women/)
85. Research on Women in Policing: A Look at the Past, Present and Future [https://www.researchgate.net/publication/230814746\\_Research\\_on\\_Women\\_in\\_Policing\\_A\\_Look\\_at\\_the\\_Past\\_Present\\_and\\_Future](https://www.researchgate.net/publication/230814746_Research_on_Women_in_Policing_A_Look_at_the_Past_Present_and_Future)
86. Premier Body Armor: «Female Body Armor» <https://premierbodyarmor.com/collections/female-body-armor>
87. Police Federation: «The 3rd Generation Body Armour» <https://www.polfed.org/campaigns/body-armor-matters/the-3rd-generation-body-armour/>
88. The Telegraph : «Female police officers issued specially-designed body armour» <https://www.telegraph.co.uk/news/2023/04/15/female-police-officers-given-specially-designed-body-armour/>
89. 2572/A(E) XXVII. GP - Entschließungsantrag [https://www.parlament.gv.at/dokument/XXVII/A/2572/fname\\_1447887.pdf](https://www.parlament.gv.at/dokument/XXVII/A/2572/fname_1447887.pdf)
90. Department of Justice: «Body Armor Performance Standards and Compliance Testing» <https://nij.ojp.gov/topics/equipment-and-technology/body-armor/performance-standards-and-compliance-testing>
91. National Institute of Corrections: «NIJ Selection and Application Guide» <https://nicic.gov/series/nij-selection-and-application-guide>
92. EnGarde: «NIJ Body Armor Standard provides the performance level for most ballistic-resistant vests» <https://www.engardebodarmor.com/nij-body-armor-standard/>
93. U.S. Army: «The Army's drive to address equality in uniforms and personal equipment» [https://www.army.mil/article/257157/the\\_armys\\_drive\\_to\\_address\\_equality\\_in\\_uniforms\\_and\\_personal\\_equipment](https://www.army.mil/article/257157/the_armys_drive_to_address_equality_in_uniforms_and_personal_equipment)