IDF COMBAT METHODS AND INNOVATION DIVISION (shiluach)

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**Memorandum for: CG, DEVCOM, U.S Army Futures Command**

The following document should serve as a principal guideline for initiating the cooperation between the IDF Combat Methods and Innovation division, a.k.a “Shiluach” (Force Buildup Directorate – J8) and the US Army Futures Command.

The Shiluach division was established in 2019, in accordance with the CHOD’s directive "The establishment of the 'Combat methods and innovation division' is a gospel to the IDF; It will improve significantly the development of combat methods, the innovation and changing processes and the quality of the power building of the military".

The division was established in order to increase the IDF effectiveness and lethality to the joint force, to increase the rate of transformation in the military and promote innovation and advanced methods throughout all services of the IDF.

Please see, TAB A, enclosed in this document for additional information regarding the construct of the division.

During the upcoming ”shiluach” CG trip to the USA, 15-19 AUG2021, the following items comprise the areas of interest for future cooperation between the IDF and the AFC.

Artificial intelligence and Machine Learning

* Airborne UAV-based persistent surveillance.
* Air deployed unattended ground sensors for persistent surveillance.
* Automation and information utilization processes (operational process for warfighters use, 2DSSS, maneuver and fire support).

1. היתוך סנסורים
2. מיצוי מידע
3. בינה מלאכותית
4. תהליכי אדם-מכונה
5. אמלח ויכולות אוטונומיות
6. עליונות במידע - מודיעינית ומבצעית
7. תשתיות מידע: עננים וחישוב מעצמתי
8. תכנון והטמעת טרנספורמציה דיגיטלית
9. תהליכי חדשנות דיגיטלית

Autonomous robotics

* Autonomous capabilities in urban warfare, specifically Man-SWARM teaming.
* SOPs and TTPs to employ and use robotics and complex arrays.
* High yield Autonomous mobile tactical Hover-UAV airfield

Digital transformation in the battlefield

* Advanced sensors (phishing)
* Immune communication systems based on LTE and 5G
* Communication architecture
* Network based attack capabilities and interoperability in offensive forces.

Organizational transformation

Other:

* Tactical VTOL.
* Maneuver survivability

Multi-Mission long endurance Hover-UAV with hybrid propulsion

Air-Deployed Multi-Mission Lite-UGV

Indoor capabilities: Hover-UAV, UGV, Sensing, Communication

Through the wall sensing

תהליכי סגירת מעגל מבוססים חישה קדמית ואוטומציה בין כלים אוויריים לכוחות היבשה

חשיפת אויב נעלם - שימוש בכלים פשוטים ומוצרי מדף בקצה ותהליכי עיבוד והיתוך אוטומטיים לחשיפה מהירה של אויב וסגירת מעגל
בניית כלי DSS ללוחמים ושילובם במערכות המבצעיות (בדגש על כלי ניתוח שטח והמלצות מבצעיות לתמרון וסגירת מעגלי אש); פיתוח תול לשימוש בכלים

**Tab A – Combat methods and innovation division (J8)**

‘Designation and Roles

1. **Context:**
2. In accordance with the CHOD's directive, a Combat methods and innovation division was established in the Planning Directorate.
3. As the CHOD defined: "The establishment of the 'Combat methods and innovation division' is a gospel to the IDF; It will improve significantly the development of combat methods, the innovation and changing processes and the quality of the power building of the military".
4. The purpose of the command is to instruct the General Staff Directorates, Forces and Units that are in touch with the Combat methods and innovation division.
5. **Designation:**

Designing and Formation of new Multi-armed combat methods, arranging multi-armed architecture and promotion of innovation, all of this to increasing the IDF's effectiveness in the battlefield and increasing the changing rate.

1. **Roles**:

Day-to-Day roles

1. Design and architecture of the multi-armed power building in continuous and long-term manner.
2. Development new perceptions of innovation in combat methods.
3. Transport of multi-arm systems in the power-building.
4. Building multi-armed innovation processes alongside providing, stage, tools, examination capabilities and processes for new ideas in the IDF.
5. Creating coherence and effectiveness of IDF power building processes versus perception.

Contingency Roles

1. Activation of a General Staff mechanism for innovation.
2. Assistance of the J3 in general-staff level leading in the anti-rockets issue.
3. Operation Mains:

Day-to-Day

a. The Combat methods and innovation division operating as a staff office in the general staff, Conducts processes in the field of planning the power building, under the DCHOD and the CHOD's guidelines.

Emergency Roles
**Anti-Rocket**

1. Integration of force building efforts as part of the response efforts against rockets of the J3 in combat.
2. Establishment of an anti-rocket desk in the J3 or assistance for existing desks.

**Innovation**

The division, with cooperation of the R&D Department at DDR&D, Operate a mechanism to promote the implementation of operational applied innovation according to various requirements (BU/TD).

1. **Multidimensional Systems Department**

The Department will lead transformation processes in the power building, both by leading systems in the face of large and complex problems and by developing and building innovative combat methods and examining them through experiences for accelerating the power building and its accuracy.

In addition, the department will guide multi-armed technical programs in order to create technical coherence between the programs and lead them through combat methods and experiences.

1. **Combat Methods Branch**

Purpose: Combat Methods Branch will work for the production and implementation of innovative combat methods and optimal utilization of the potential inherent in the plans and power building; that's from general-staff view, according the concept of victory.

Roles:

1. Design and formulation of new combat methods — Power building, Operation, Intel and Power Activation.
2. Leading of Multi-armed plans.
3. Directing the General Staff directorates to the coherence of the power building in the field of combat methods.
4. **Experiences Branch**
5. Purpose: Experiences Branch will accelerate innovative power building, Multi-armed and Multidimensional, by creating dedicated experiences that will aim and create combat methods, capabilities and multidimensional experiences for duplication and assimilation in the entire IDF.
6. Method: Experiences in collaboration with the technological factors units in favor of friction with operational units, multi-arm integration and learning and characterization as an integral part of the development process, promoting power building that enables accuracy in developing capabilities and adapting capabilities to the user and multi-arm coherence and resource saving.
7. Roles:
8. Responsibility for the experience program in the MVP method.
9. Creation of a joint and spiral development process based on field experiences by multi-armed combat methods and their assimilation into the work plans of the forces and administrations.
10. Leading the learning and interrogation from the

experiences and assisting in their assimilation into all the units in the IDF while improving the power building processes.

1. Planning, Approving and Monitoring of all the needs and resources to exist experiences to the designed units.
2. Advice and monitoring in the field for the Power Building and Planning Division through the dedicated experiences for the accuracy and acceleration of the IDF's transformative plans.
3. **Systems Branch**
4. Purpose: The System Branch will lead selected systems to change and readiness for the IDF in the face of the overall systemic challenge continuously, in the long term and in all areas of activity: power building, power activation, intelligence and R&D
5. Roles:
6. Leading the anti-rocket administration and the anti-rocket campaign.
7. Leading in few more central systems.

**9. Innovation Branch**

a. Purpose: The Innovation and Process Acceleration Branch will develop methods, concepts, trainings and mechanisms for power building and assimilating innovation in the IDF. The Branch will work to promote cultural change that encourages entrepreneurship that combines an operational need with and applied approach while identifying common interests and creating valuable connections. The Branch will constitute a HUB for the germination and implementation of multi-armed initiatives and projects in response to operational challenges and core organizations while merging knowledge, human capital and resources in the IDF and beyond.

b. Roles:

1. Building tools and methods for implementing applied innovation in the IDF, for example- Canvas, dedicated workshops, Design sprint, etc.
2. Development of professional knowledge in the field of innovation and its access to leaders for IDF commanders-courses, lectures, workshops, trainings and a million terms in the field of innovation.
3. Initiating and realizing multi-armed record shows such as the Icon, the CHOD's award for innovation and more.
4. Creating strategic collaborations with non-IDF professionals involved in innovation such as the defense community, start­up companies, foreign armies and academies.
5. Innovation in the IDF's Power Building — developing and strengthening the IDF innovation community, planning process of the position of 'IDF's Innovation leaders' (locating, sorting, standardizing and placing) and command of an innovation leaders course in their mandatory service.

Mapping in innovation processes in the IDF and formulation of optimal responses for them Creating strategic collaborations with non-IDF professionals involved in innovation such as the defense community, start­up companies, foreign armies and academies.

The experiments branch began it’s way as a directorate and organizing unit of multidimensional unit – overseeing the force buildup and standing up the unit. As a joint staff entity that works directly with the “end user”, an operational unit, conducting operational and non operational experiments enables the joint staff to connect the “tactical” level process to the joint staff force buildup process. Nowadays, the branch directs the force buildup process of the unit and provide guidance, direction and priorities for the multi-domain maneuver in light of projects and initiatives as part of the “Tnufa” multi-year plan. Unlike traditional force buildup processes, the experimental branch enables parallel R&D and experiments that allows a more accurate process in a “spiral” method.